# The Erasmus Wilson Lectures

ON

# THE PATHOLOGY AND DISEASES OF THE THYROID GLAND.

*Delivered at the Royal College of Surgeons of England on Feb. 18th, 20th, and 22nd, 1901.*

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## LECTURE II.[1]

*Delivered on Feb. 20th.*

MR. PRESIDENT AND GENTLEMEN,—Having in the previous lecture considered the effects produced by total excision of both the thyroid gland proper and the parathyroid glands, and also by the removal of the thyroid gland only, we have now to determine the results of removing the parathyroid glands only.

It 1896 it was pointed out by Vassale and Generali that if in dogs all the parathyroid glands were removed and the thyroid gland proper left the dogs would die just as they do, and with the same symptoms, as when the thyroid gland and the parathyroid gland are completely removed. Their experiments have now been repeated several times and in the main they have been confirmed. My own results were as follows. In 16 dogs it was intended to remove all four parathyroid glands, leaving the thyroid lobes intact; but it is not easy to find all the parathyroid glands in an operation, and it was subsequently seen that in seven of the dogs one (and in one case two) of the parathyroid glands had been left; in only nine then had all the parathyroid glands been removed, and it cannot be absolutely affirmed that in these no parathyroid had been left, because the only way of making sure is to cut and to examine consecutive sections of both thyroid lobes, and this was not done. However, in the nine dogs no parathyroid glands were subsequently found and it is probable that none were left. Of the nine dogs four died; one in two days, one in four days, one in seven days, and one in 28 days. The other five survived, but three of them had temporary symptoms; thus, of the nine dogs which underwent complete parathyroidectomy four died, three recovered after symptoms, and two escaped all ill consequences. In my hands, therefore, the results of parathyroidectomy were not so bad as were those of total excision, but, on the other hand, in a recent paper Vassale and Generali state that they have found them even worse—that is to say, that while both operations are fatal the dogs die more quickly after removal of the parathyroid glands only than after total excision, and further, that if after parathyroidectomy the thyroid lobes are removed a day or two later the dogs will live longer than they would have done had the lobes been left.

The changes which occur in the thyroid lobes which are left in these operations are very interesting—the colloid diminishes or completely disappears, and its place is taken by a watery secretion; the vesicles instead of remaining round become branched and the secreting cells become columnar or multiplying fill the cavity of the vesicles with round cells. These changes are identical with those described as "compensatory hypertrophy," but the thyroid lobes do not appear to enlarge, but on the contrary sometimes they seem to become smaller; this, if confirmed, will coincide with the view that the parathyroid glands manufacture the secretion and the thyroid glands store it; when the parathyroid glands had been removed there would be no secretion for the thyroid lobes to store. The five dogs which, as just stated, survived excision of the parathyroids were subjected to the further operation of removal of one of the remaining thyroid lobes; two died after this and three survived; in these three the remaining thyroid lobe was excised; one died, and two, after temporary symptoms, recovered; these two lived therefore without either thyroid gland or parathyroid gland—in a state of complete athyroidea, in fact. The symptoms, and in the fatal cases the cause of death, were the usual symptoms of athyroidea—namely, tremors, unstable gait passing into paralysis of the hind limbs, emaciation, and great weakness; in two of the dogs marked narrowing of the palpebral fissures was noted. The thyroid lobes obtained by these later operations were sometimes normal and sometimes altered as described. In seven of the dogs some of the parathyroid glands had been removed, but it was subsequently found that in them one (and in one case two) of the parathyroid glands had been left. Only one of these dogs died, and that only after 72 days; thus in nine dogs with complete parathyroidectomy four died in 28 days; in seven dogs with incomplete parathyroidectomy only one died, and that only after 72 days; it died with paralytic symptoms. Although the other six dogs did not die, four of them had symptoms from which they recovered; these six dogs were submitted to further operations; in one both thyroid lobes were removed simultaneously; it died in consequence; in the other five one thyroid lobe was removed; three died in consequence; two survived, but one of them had symptoms; from each of these two survivors the remaining lobe was removed; they both died in consequence. Changes were noticed in the eyes of some of these dogs; in two of the dogs after an incomplete excision of the parathyroid glands widening of the eyes was seen and after a later operation the eyes became retracted and the palpebral fissures narrowed. In one dog two parathyroid glands were removed and two were left, one on each side; this operation produced no change in the eyes; the removal of one parathyroid gland with one lobe was followed by widening of the eyes, and the subsequent removal of the other lobe, also with a parathyroid gland, was followed by narrowing of the eyes and death from athyroidea. It would seem that removal of the parathyroid glands, if not fatal, causes (if any change) exophthalmos, but in fatal cases, whether produced by removal of the parathyroid glands or by total thyroidectomy, the eyes often become very narrow.

We have now completed our survey of the effects of the three main excision operations, but on account of the importance of exophthalmos in Graves's disease it will be well to review the effects of these operations on the eyes.

To commence with dogs. The effects on the eyes of dogs of complete excision of both the thyroid gland and the parathyroid glands is to make the eyes narrow; the dogs die from the operation and with narrow eyes. The next operation is removal of one lobe of the thyroid gland together with its two parathyroid glands, leaving the opposite lobe with its two parathyroid glands; this produces no effect on the health of the dogs, nor, as far as I have noticed, on their eyes. The same result, as a rule, follows removal of the thyroid gland proper, leaving one or more parathyroid glands. Occasionally after leaving only one parathyroid gland symptoms come on and then the eyes may become narrow. Removal of parathyroid glands, leaving one parathyroid gland and the whole or part of the thyroid gland proper, may be followed by the eyes becoming wide, and after a further operation they may become narrow. Finally, total excision of all of the parathyroid glands often causes death, and in one case at least there was narrowing of the eyes.

In rabbits two of the parathyroid glands lie distinct from the thyroid gland as a rule, and it is a simple operation to remove these and to leave the thyroid gland proper with presumably two parathyroids, or to perform the reverse operation. I made a series of experiments to test the effects of these operations on the eyes. Of six rabbits in which the thyroid gland was removed three have since died, and they died with narrow eyes; in one of the survivors the eyes are now normal, having once been narrower than before operation; in one they are now normal, having once been wider; and in the third they are becoming normal, having been wider. On the other hand, a much stronger tendency to the eyes becoming wide was seen in the rabbits from which two parathyroid glands were removed; out of five experiments in one no change occurred, but in all the other four the eyes became wide for a time, but have since become normal.

In monkeys the only operation performed was total excision of the thyroid gland and the parathyroid glands; as a rule (and always at the latter stage of the illness when the monkey is dying from athyroidea) the eyes are narrower; but occasionally after the operation the eyes become wider.

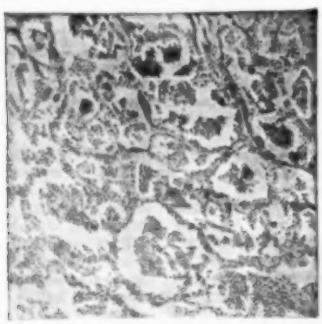
The conclusion of the matter would seem to be that excision of the thyroid gland and the parathyroid glands produces enophthalmos with narrowing of the palpebral fissures; total parathyroidectomy would seem to produce the

[1] Lecture I. was published in THE LANCET of May 11th, 1901, p. 1317.

same, and so also (if it produces symptoms) does excision of the thyroid gland proper, but certain operations not fatal at the time, and especially those in which the parathyroids are interfered with, may be followed by exophthalmos with widening of the palpebral fissures. The same operation may be followed by first widening and later narrowing, but I have never seen the reverse—at least, not as a permanency. It will be noticed that these eye changes tend to support the suspicion that the parathyroid glands are involved in the pathology of Graves's disease.

The preceding experiments apply to the action of the thyroid gland, or of portions of it, when the nervous supply is intact; but the well-known effect on the salivary glands of interference with their innervation leads to the question whether the internal secretion of the thyroid gland is under the control of the nervous system. Various experiments have been made to test this: Schiff stripped the sympathetic fibres accompanying the blood-vessels going to one lobe of the thyroid gland from them, leaving the opposite lobe intact; but the well-known effect on the salivary glands of interference with their innervation leads to the question whether the internal secretion of the thyroid gland is under the control of the nervous system. Various experiments have been made to test this: Schiff stripped the sympathetic fibres accompanying the blood-vessels going to one lobe of the thyroid gland from them, leaving the opposite lobe intact; on subsequently comparing the lobes of the two sides he could find no difference between them; the interference with the sympathetic had produced no result. Horsley tried the effect of dividing the recurrent laryngeal nerve to one lobe; that, too, produced no difference on the two sides. I myself divided the vagus on one side; as the division was below the origin of the superior laryngeal nerve the operation was practically the same as Horsley's division of the recurrent laryngeal nerve and the result was the same—a negative one. Katzenstein tried the effect of electrically stimulating one lobe of the thyroid gland; that, too, produced no alteration in the microscopical appearances of the two sides. However, at last a positive result was obtained. Exner found in two experiments on cats that the division of the superior and inferior laryngeal nerves supplying one lobe of the thyroid gland and the excision of the opposite lobe caused severe tetany, showing that the function of the "paralysed" lobe was greatly interfered with. I have repeated Exner's experiment (with an unimportant modification) and have obtained similar results. The experiments were made on dogs and consisted in excising a length of the superior laryngeal nerve on one side and also on that side a length of the vago-sympathetic at the level of the thyroid, and finally on the opposite side excising the thyroid lobe together with its parathyroid gland. The experiment was performed nine times; the result was that three of the dogs died, one in 18 hours, one in two days, and one in three days. Of the six survivors four had athyroidic symptoms and two had no symptoms;

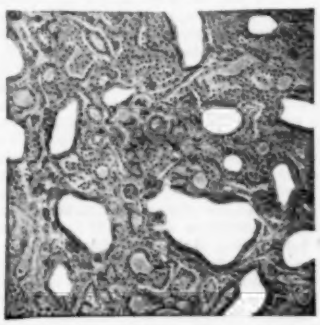
FIG. 7.



From a dog the parathyroid glands were removed; the dog died in seven days in consequence. The drawing shows the changes which occurred in the thyroid lobes (which were left).

thus out of nine dogs operated on seven had symptoms and three of them died; it is therefore to be inferred that the secretion of the thyroid gland is under the control of the central nervous system; that this is so is further supported by the microscopical examination of the thyroid lobes which had had their innervation interfered with. Out of the nine experiments two dogs survived without symptoms; in one the first lobe removed did not appear normal under the microscope and it will therefore be safer to reject this experiment altogether; in one the operated lobe appeared normal; as this dog had no symptoms it is possible that there was something wrong in the experiment—any way, the absence of symptoms and of alteration in the lobe go well together. With respect to the remaining dogs which had symptoms, from two there are no specimens, from one because the dog is still alive; there remained then five specimens from five dogs, all of which had symptoms. The results of microscopical examination were: (1) from all five of these lobes the colloid had completely disappeared; and (2) in four of them the secreting cells had multiplied into the cavity of the vesicles; this is different from the usual appearances in compensating hypertrophy, in which, as a rule, the secreting cells become columnar but do not invade the cavity of the vesicle—it is rather the appearance seen in any remaining portion of a lobe when compensation has failed and death is occurring from athyroides. (Fig. 7.) With respect to the fifth lobe, the dog having survived the experiment the lobe was excised 49 days later. It was greatly enlarged and weighed 3·5 grammes, which is three or four times the normal weight. All colloid had disappeared, but the secreting cells and their progeny were not in this case filling the cavities of the vesicles which contained instead a watery secretion. The great size of the lobe was due to the growth of young thyroid tissue between the vesicles. (Fig. 8.) It is clear then that the inter

FIG. 8.



A microscopical section of the thyroid lobe of the dog referred to in the text.

ference with the nerve-supply produces very serious symptoms, and when we come to consider the pathology of thyroid disease we must be prepared to admit the possibility of defective innervation being the cause of serious symptoms and pathological changes. With respect to the sympathetic nerve-supply, Schiff, as stated, came to the conclusion that it produced no effect. In the submaxillary gland the sympathetic carries but few secreting fibres, the main supply being through the chorda tympani. Such, then, are the results of deprivation of thyroid secretion by operations for the removal of the thyroid system in whole or in part, or by interference with its nerve-supply.

We now proceed to consider the results arising from an excess of thyroid gland in the system. This can theoretically be effected in two ways—either by grafting additional thyroid gland into the body or by the administration of thyroid gland for thyroid preparations. Grafting, as already stated, seems unsatisfactory, and it has not yet been carried out so as to justify any physiological conclusions as to its effects; on the other hand, the results of thyroid-gland feeding have been carefully investigated both in normal and in diseased subjects. In a healthy man Dr. G. F. Johnston found by experiments on himself that after taking from four to nine thyroid-gland tablets a day there was acceleration of the pulse from 70 to 120, accompanied by palpitation, flushing, tremors, sensation of heat, and perspirations. Similarly, M. Gagnevin, a medical student, took for eight days full doses of raw thyroid gland; this produced palpitation, a rapid pulse, tremors, perspiration, flushings, and (as was noticed by his friends) exophthalmos. Also Dr. Bécière has recorded a case of myxœdema in which very large doses of thyroid-gland preparation were taken. The disease was relieved, but temporary symptoms of thyroid intoxication were produced; they were quickened pulse, quickened respiration, rise of temperature, sensations of heat,

increased perspiration, mental agitation, tremors, incomplete paraplegia, increased secretion of urine, temporary albuminaria, and a certain degree of exophthalmos. Similarly, Easterbrook found in the human subject that the administration of thyroid gland produced: (1) a loss of weight, about seven pounds a week; (2) some pyrexia; (3) some increase of perspiration; (4) diminution of red blood corpuscles; (5) headache; (6) tremors; (7) an increase of pulse-rate by about 40 a minute; (8) an increase of rate of respiration by about six a minute; (9) a diminution of appetite; (10) an increase of menstruation; and (11) an increased amount of urine, often of albumin, but never of sugar. He concludes that thyroid substance is a profound katabolic stimulant.

In healthy animals thyroid-gland administration does not produce much effect unless carried out in very large doses. I gave a dog two thyroid glands of the sheep a day without any obvious effect, also to another dog the thyroid glands of 16 sheep without any result, and others have made the same experiment also with negative results. Chasevant fed a dog with the thyroid gland of the ox. He gave to the dog in 57 days 1361 grammes of thyroid gland; the only result was loss of flesh—the weight fell from six and a half to eight kilogrammes; there were no other symptoms, no rise of temperature, no loss of good temper, and no morbid symptoms whatever. In 1895 Ballet and Enriquet experimented on dogs in three ways: by thyroid-gland grafts in two cases, by thyroid-gland feeding in six cases, and by thyroid-gland injections in 12 cases; in three out of the six dogs fed with thyroid gland distinctive symptoms were obtained; these consisted in rise of temperature, rapid pulse, tremors, conjunctivitis, emaciation, and in one animal quite distinct exophthalmos. In two of the animals in which the injections were used there was observed to be a slight prominence of the eyes not amounting to exophthalmos.

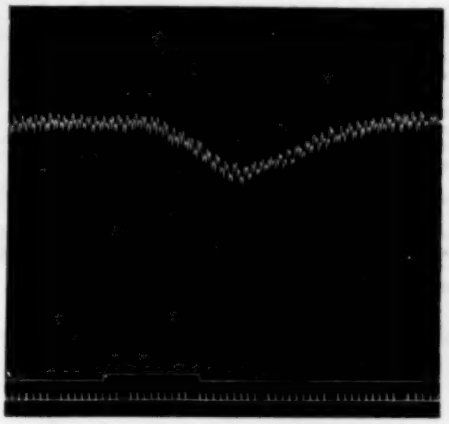
In a rabbit to which Cunningham administered by the mouth 0·1 gramme of thyroid extract exophthalmos was caused. He gives a photograph of the rabbit which shows the exophthalmos very clearly.

In monkeys I have found the administration of large doses of thyroid extract produce marked results. The preparation chiefly used was thyro-colloid which is made from the thyroid glands of sheep by a process devised by Dr. R. Hutchison. In principle it consists in dissolving out the colloid with a dilute alkaline solution and precipitating with acetic acid. Large doses of this preparation were administered to six monkeys, the daily dose corresponding to from one-half to three whole thyroid glands of a sheep a day. Well-marked symptoms were produced—namely, proptosis, dilatation of pupils, widening of palpebral fissures, erection of hairs on the head, the hair falling out in patches, paralysis of one or more limbs, emaciation and muscular weakness, and finally death from asthenia. The average life of the monkeys after the commencement of this treatment was 76 days.

Of the above effects those produced on the eyes are no doubt caused mainly by action through the cervical sympathetic. Division of the cervical sympathetic causes (1) recession of the eyeball, (2) contraction of the pupil, (3) narrowing of the palpebral fissure, (4) œdema and flushing of the skin round the eye, (5) swelling of the caruncle, (6) projection of the pinna from the side of the head, (7) puckering of the skin of the muzzle, and (8) flattening of certain hairs on the forehead which cannot then be elevated by emotions which affect the corresponding hairs on the opposite side. On the other hand, stimulation of the cervical sympathetic produces: (1) proptosis of the eyeball; (2) well-marked dilatation of the pupil; (3) widening of the palpebral fissure; (4) lying back of the pinna; and (5) erection of certain hairs on the head.

In order to test how far the effects upon the eye of thyroid-gland feeding were produced through the sympathetic in two monkeys I excised a length of the cervical sympathetic on one side. After allowing a few days for recovery from the effects of the operation thyroid-gland feeding in large doses was commenced; 12 days later it was found on comparing the monkeys with sketches made before operation that on the unoperated side the palpebral fissure had become very wide, the eyeball very prominent, and the pupil much dilated. On the side on which the sympathetic had been divided the fissure was narrow, the eyeball not prominent, and the pupil not dilated. In one of the monkeys 12 days later the difference in the eyes was much less marked, although the feeding had been continued; this may possibly be due to some repair having occurred in the sympathetic. This is said to happen even when, as in this case, a length of the nerve has been excised.

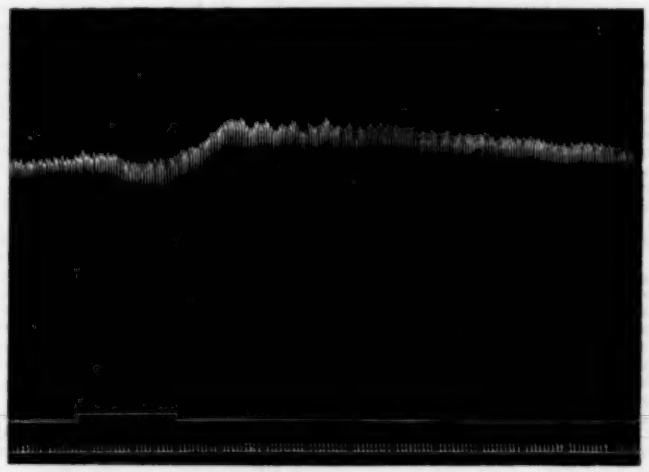
FIG. 9.



The effect of intravenous injection of thyroid extract into the normal dog. The injection was made during the time shown upon the upper line; it caused a fall in blood-pressure. (Read the tracings from left to right.)

There are comparatively few observations on the action of parathyroid gland. Easterbrook in his investigation found that it produced no affects, thus markedly contrasting with the thyroid gland. Hutchison tried parathyroid gland in a case of myxœdema, but without producing any improvement; but Hutchison states that parathyroid gland undoubtedly produces beneficial results in animals that have been deprived of their parathyroid glands.

FIG. 10.

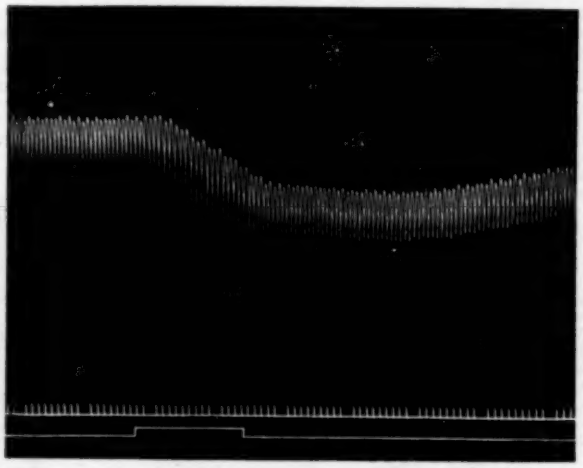


The effect of the earlier intravenous injections of thyroid extract into a dog suffering from experimental athyroidea; it causes a rise in the blood-pressure.

The effect of the intravenous injection of thyroid extract into animals has been investigated by Oliver and Schäfer; they found a marked fall in the blood-pressure produced, but the force of the heart's contraction and the pulse-rate were not materially altered.

The effects of the injection of thyroid extracts into thyroidless animals have been tried by von Cyon who has written a series of very interesting papers on the relations of the thyroid gland and the heart, and (with the kind assistance of DR. T. G. Brodie) by myself. The injection of thyro-colloid into thyroidless dogs causes a rise of blood-pressure—at least, that is the effect of the earlier injections; later injections produce, as in the normal, a fall; these phenomena may be explained by assuming that thyro-colloid stimulates both the depressor and accelerator mechanisms, that while the former preponderate in the normal, athyroidea so alters their relative response that in it the accelerators preponderate at first, but that the earlier injections of thyro-colloid so revives the depressors and vagi that the later injections produce the normal effect. Von Cyon states that in the goitrous animals of Berne and in athyroidea the excitability of the vagi and depressors is diminished or abolished and that of the sympathetics (vaso-constrictor and accelerator) is increased. (Fig. 9, Fig. 10, and Fig. 11.)

FIG. 11.



The effect of the later injections of thyroid extract into a thyroidless dog; it causes, as in the normal, a fall of blood-pressure.

# A Clinical Lecture

ON

# CASES ILLUSTRATING THE SURGERY OF THE THYROID GLAND.

*Delivered at St. Thomas's Hospital on Oct. 17th, 1900,*

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[THE lecturer first reviewed certain points in the anatomy and physiology of the gland, referring particularly to the development of the pyramidal lobe and to the effects produced by the absorption of the thyroid secretion. He then said:]

The first group which I will discuss consists of cases of parenchymatous goitres where there was general enlargement of the gland, almost symmetrical, without any pulsation or other signs of Graves's disease. Their consistency is generally soft, but the density of the inclosing fascia often produces a certain amount of firmness. The enlargements may take place slowly, but in some cases they may develop rapidly, producing a characteristic and distressing train of symptoms. This rapid increase seems to occur particularly in young subjects about the onset of puberty and no doubt it bears some direct relation to the awakening activity of the sexual organs.

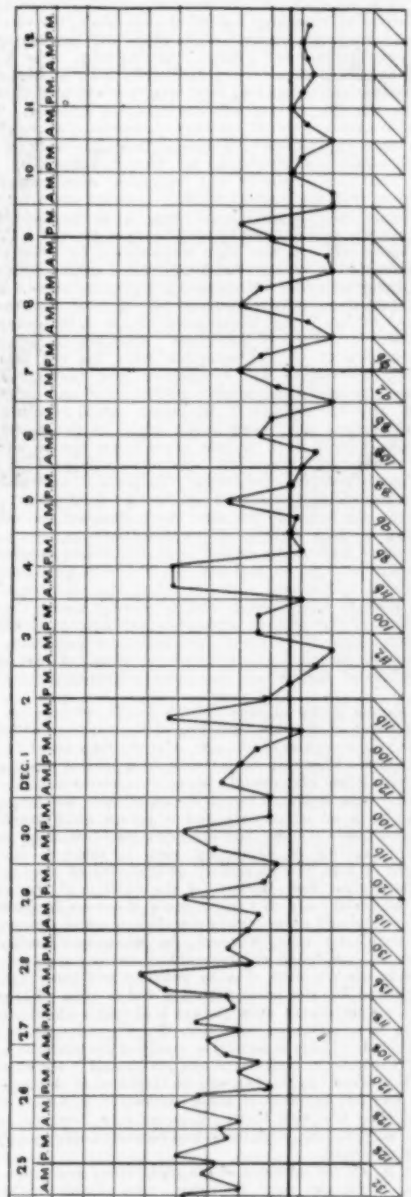
CASE 1. *Parenchymatous goitre; reduction under thyroid extract.*—The patient, a male, aged 17 years, was admitted to hospital on July 31st, 1896. One of his sisters had had a unilateral swelling for 12 years. 12 months previously he had had influenza and just afterwards his neck was noticed to be enlarging on both sides. The swelling increased gradually with at times, he thought, a slight decrease. There was no pain but it seemed to throb. His breathing was noisy when at work and sometimes he had a feeling of suffocation. About four months before he had had a bad attack of dyspnœa at night but this had never been repeated: he slept well usually. There was discomfort on swallowing. Both lobes and the isthmus formed a soft, symmetrical enlargement without any pulsation. His eyes seemed a little prominent, but this appeared to be only accidental, as there were no other signs suggesting Graves's disease. His neck, measured through the isthmus, was 15½ inches on August 3rd and thyroid extract was ordered, as he had no urgent symptoms. This produced remarkable benefit, as on the 6th the measurement was 14¾ inches on the 10th 14½ inches, on the 14th 14¼ inches, and on the 18th 14 inches. Accordingly he was discharged to go on with the treatment outside.

CASE 2. *Parenchymatous goitre; enlarged pyramidal lobe; operation; thyroidism; recovery.*—A youth, aged 16 years, a patient of Dr. G. H. Wickham of Fleet, Hampshire, came under my care on June 8th, 1897. Between four and five months the swelling of the neck had been noticed. It had grown gradually at first, but during the last six weeks its growth had been rapid, so that marked dyspnœa and some difficulty in expectorating had resulted. He was rather a heavy-looking boy who when sitting up did not appear to have any difficulty in breathing except on much talking, but in the reclining position his respiration was noisy with marked stridor. He was very restless at night and he constantly started up with a feeling of suffocation. The gland was considerably enlarged, the lateral lobes symmetrically; between these was a central mass inclining rather to the left of the mid-line, reaching almost to the hyoid bone. The whole gland was somewhat elastic, uniform in consistency, and without any prominent or fluctuating areas. There appeared to be no extension behind the sternum, but there was undoubted tracheal stridor. During the day and night of the 9th the patient's breathing was much embarrassed, and in the early morning of the 10th his condition seemed to be so grave that it was determined to relieve the pressure on the trachea. A vertical incision was made down to the gland and the isthmus with an enlarged pyramidal lobe was found completely to cover the trachea. He now became asphyxiated, and as an immediate opening into the trachea was imperative, the gland was cut through (its thickness being quite three-quarters of an inch) down to the trachea, which was opened and a No. 12 catheter was introduced. With ether and strychnine he soon revived. The operation was then proceeded with. The isthmus was removed without much hæmorrhage and without being ligatured laterally. The trachea was found to be much compressed laterally and softened from absorption of the cartilaginous rings. The wound was then left open at the bottom and was lightly packed with gauze, and an ordinary tracheotomy tube was left in. The next day, as his breathing was not very satisfactory, a König's vertebrated tube was inserted with much subsequent benefit, and it was finally removed on the eighteenth day. For a fortnight after the operation the patient had a very erratic temperature without any local cause which, associated with some feeling of oppression, slow healing

of the wound, and somewhat marked watery discharge, pointed to thyroidism from the absorbed secretion. Locally the lateral lobes dwindled rapidly after the operation and they became much softer. He left the hospital at the end of the month. His subsequent progress has been most satisfactory; he has never had any more enlargement and he can work hard without dyspnœa (October, 1900).

CASE 3. *Large parenchymatous goitre with pyramidal lobe; section of the isthmus and removal of the lobe; thyroidism; recovery.*—The patient, a female, aged 15 years, came under my care in St. Thomas's Hospital on Nov. 22nd, 1899. Beyond that of the grandmother having a goitre there was no other history. The girl had always been healthy until three years before, when a lump in the front of the neck was first noticed; it was small and was confined to the middle line. During the fortnight before admission the swelling had been getting rapidly larger, especially at the sides of the neck. When lying still there was no dyspnœa, but on any exertion it was very marked and she felt nearly suffocated; in fact she was hurried to the hospital after a very severe attack in which it was thought she would succumb. On admission the thyroid gland was found to be enormously enlarged and towards the lower part could be felt a cleft in the middle line between the lateral lobes corresponding to the isthmus. Between what were made out to be lateral lobes above was a central swelling, a little more to the left side, which reached up to the hyoid bone. On relaxing the neck the whole mass was rather soft, without any pulsation. There was some tracheal stridor and any lateral movement of the head brought on a severe attack of dyspnœa. There was no exophthalmos, but the pulse was rather irregular and about 100. As the patient's condition did not permit of delay to try the administration of drugs, she was brought to the theatre on the afternoon of the 23rd. Chloroform was administered and a vertical incision was made in the middle line through the skin and fascia, several very engorged veins having to be tied, and the growth was exposed. At this stage she became cyanosed and stopped breathing. As artificial respiration did not relieve this condition an opening was made into the trachea by cutting down through the right side of the central mass—this opening was through the crico-tracheal interval and the first ring—and a tube was introduced. The patient's breathing then went on satisfactorily and the operation was proceeded with. The isthmus which consisted of a fair thickness of thyroid tissue was cut through down to the trachea and portions of it were removed but not ligatured off. The pyramidal mass connected with the isthmus above was able to be dissected away and was removed *in toto*. After all bleeding, which was not severe, had been stopped the upper part of the wound was stitched up with horsehair, but the lower part was left open and was loosely packed with cyanide gauze. The trachea was found to be much flattened laterally. As before leaving the table the short tracheotomy tube did not seem satisfactory it was taken out and a König's tube was put in its place. After reaching the ward the patient again became cyanosed and began to struggle violently; a quarter of a grain of morphia administered hypodermically brought relief. At about 11 P.M. she again had dyspnœa and the tube was removed. As her breathing seemed to be much easier without it it was kept out and the wound was covered up with sterilised gauze. As shown in the annexed chart there was marked rise of temperature with rapid pulse lasting for nearly a fortnight. This was accompanied by restlessness, at times a feeling of suffocation and some cough, but without any physical signs in the chest. For some days there was watery discharge from the wound which was never offensive. On Dec. 2nd the tracheal wound was closed and the remainder granulated up slowly. From this time onwards she had no drawbacks, but the wound was not healed until Jan. 10th, 1900. There was no discomfort on moving the head. The lateral lobes diminished in size very rapidly after the operation. The growth on examination proved to be a soft parenchymatous goitre.

The last two cases just detailed have several important features in common which are worthy of note. There had been in adolescence the somewhat rapid enlargement of the gland, attended with breathlessness, particularly on exertion. In both the isthmus of the gland was very well developed, rendering the position of the trachea deeply placed, and this was associated with the presence of the pyramidal lobe.




Temperature and pulse record of Case 3.

The probable thickness of the gland over the trachea should always be anticipated and, knowing how liable such patients are to failure of breathing during the operation, the surgeon should never embark on such a procedure without having at hand a long catheter and a König's flexible tube. The tissue forming the isthmus was freely divided in both cases and in the girl's case the pyramidal lobe was removed in addition. Before section the isthmus was not ligatured laterally. The trachea on exposure was in each case compressed at the sides and its walls were thinned; in spite of this there were no unpleasant sensations afterwards on free movement of the neck. The after-results of the operation were eminently satisfactory from the marked relief of pressure and from the dwindling of the enlarged lateral lobes, but as the immediate sequel certain well-defined symptoms were present. There was an extremely irregular high temperature for some days afterwards, with a feeling of suffocation and restlessness, and a rapid irregular pulse, but without any physical signs. This combination of symptoms has been recorded before in cases described by Mr. Victor Horsley and Dr. A. J. Rodocanachi and by Mr. F. T. Paul of Liverpool. They are, in fact, due to the absorption of the secretion from the cut thyroid gland by its vessels and lymphatics and the symptoms resulting are such as would occur from an overdose of the thyroid extract. In some cases death has followed without any lesion being found at the necropsy, and I can picture such a case some years ago in which, before the correct explanation was forthcoming, death was attributed to iodoform poisoning. To prevent such absorption the risk of tension should not be run from suturing up too much. It is better to leave the bottom of the wound open and to pack lightly with gauze, removing the same from time to time when soaked with the wound exudation. If symptoms should so indicate the wound in addition may be irrigated. It should also be noted that although the wound may be quite clean healing is very slow. On the occurrence of restlessness, breathlessness, &c., good effects have been obtained by the administration of morphine, and arsenic may be tried which has been found of use when an overdose of the extract has been administered by the mouth.

The second group of cases which I will refer to are the thyroid gland adenomata, encapsuled tumours embedded in the gland substance as elsewhere. Usually they occur singly, but sometimes they may be multiple in a lateral lobe; more rarely both lobes may contain these encapsuled masses, and then some care must be taken in establishing the diagnosis between such an occurrence and a general enlargement of the gland itself. Upon the following points we may rely: the improbability of symmetry and, if there is marked difference in size, the possibility of diversion of the trachea from its normal line—instead of the outline of the gland being preserved, only on a larger scale, there are irregularity of the surface and some convex prominence usually forwards. This irregularity may, however, be somewhat masked if there is an associated enlargement of the parenchyma, but the latter complication may be reduced and the diagnosis strengthened by the administration for a time of thyroid extract. A unilateral enlargement is almost without exception due to an adenoma, especially if malignant disease can be excluded. There is usually a localised convexity in some part of the anterior surface of the gland, and if the enlargement is marked the trachea will be displaced to the opposite side. The development of these tumours is, as a rule, slow, so that they are well borne; pressure may, however, occur on the surrounding structures and corresponding symptoms may be produced.

CASE 4. *Cystic adenoma of the right lobe; removal.*—The patient, a female, aged 36 years, was admitted into St. Thomas's Hospital on August 6th, 1896. She first noticed the lump on the right side of the neck four months before when it was of the size of a small egg, but since that time it had reached the size and shape of an orange. No inconvenience was produced. The tumour over its greatest prominence was somewhat elastic. An incision was made down to the gland along the inner border of the sterno-mastoid. After incising the thin capsule of gland tissue the greyish wall of a cystic tumour was exposed and, after evacuating some greenish-brown fluid, its walls were easily dissected out from the surrounding gland substance which was left, especially at the upper part. The gland substance then came together easily and the wound was sutured up, a small gauze drain being left at the bottom of the wound which was removed at the end of 36 hours. The patient made an uneventful recovery. The adenoma had a well-marked fibrous capsule with one main cyst anteriorly into which projected soft glandular processes and on the deep aspect especially of this cyst was somewhat soft and rather grey glandular tissue in which were other small cysts.

CASE 5. *Adenoma of the right lobe; enucleation.*—The patient was a female, aged 17 years, who was admitted into the hospital in June, 1899. In the right lobe was a small convex nodule of about the size of a walnut, prominent just in front of the sterno-mastoid and about the middle of the gland which had been noticed for one year. At the operation, after incising through some normal thyroid tissue a greyish-white tumour was exposed which was easily enucleated from the lower and inner side of the lobe. On section the adenoma was almost circular and about one and one-eighth inches in diameter. Inside the thickened fibrous capsule was a soft, yellowish, translucent, gelatinous tissue, without any cysts, but with a few small blood coagula flecked through it.

CASE 6. *Cystic adenoma of the right lobe; enucleation.*—The patient, a female, aged 34 years, was admitted into the hospital in June, 1899. In the right lobe was a fairly large convex swelling reaching from the middle line to under the sterno-mastoid. On making the incision in the usual way the gland was exposed with large veins coursing over its surface. Cutting through normal-looking thyroid tissue a greyish-brown convex surface was exposed, which was the tumour, and this was easily enucleated from the outer and lower part of the gland. The tumour was of the size of a hen's egg, consisting of one fair-sized cyst which contained a dirty-brown fluid and soft, greyish, friable tissue round it.

CASE 7. *Large solid adenoma of the left lobe; great displacement of the trachea; enucleation.*—The patient, a male, aged 51 years, was admitted into the hospital under my care on April 24th, 1900. His father had died from cancer and his mother from some lung complaint. She however, had an enlarged thyroid gland, as had also one of his sisters (who was operated upon and who died soon after) and one brother. At the age of 20 years the enlargement on the left side of the neck was first noticed, which slowly and steadily increased until about a year before admission; since then it had remained stationary. For the past 10 years there had been dyspnœa; this he attributed partially to an injury to his ribs in 1888. He first came to me at the beginning of 1897 with lead-palsy which soon improved. As his health, owing to cardiac disease, was not satisfactory enough to allow of removal of the growth, my colleague, Dr. H. W. G. Mackenzie, had him under his care for a while. During this period the patient had had thyroid extract, this accounting probably for any further increase being checked and certainly rendering the adenoma more defined. On examination there was a hard tumour in the left lateral lobe, markedly convex forwards and upwards; its surface seemed to be fairly smooth. There was no translucency and no fluctuation or pulsation. The trachea was pushed well over to the right side of the mid-line. The larynx was normal. The heart was enlarged and there was a systolic bruit originating at the mitral valve; its condition had so improved that my colleague agreed that operation might now be performed without any great risk. Therefore on May 17th an incision about five inches long was made along the anterior border of the sterno-mastoid, with a second one two inches long at right angles to the first. On exposing the thyroid gland numerous large veins coursed beneath its capsule which were taken up, divided, and tied. The gland was incised to a depth of a quarter of an inch when the tumour was exposed and enucleated from its capsule of gland tissue. The rings of the trachea on their left side were decidedly thinned. The thyroid tissue was brought together by buried fine silkworm-gut stitches and a gauze drain (which was removed in 36 hours) was left in the bottom of the wound. The tumour was almost globular, with a diameter of five inches. Its structure was very solid and firm, containing small cysts, none of which exceeded in size a small nut; in its centre were marked white fibrous patches and over the periphery calcification was seen in plates. With reference to his after-symptoms there is not anything special to report. The pulse remained steady between 70 and 80 and there were no symptoms suggesting thyroidism excepting some irregular temperature for the first week (this, however, never exceeded 101° F. except on the night of operation) without any trace of wound infection. The patient left the hospital with his wound healed on June 6th, and since that time he has wonderfully improved in health.

CASE 8. *Multiple adenomata of the left lateral lobe; marked dysphagia from pressure; enucleation of three separate tumours.*—A man, aged 48 years, was sent to me on August 23rd, 1900, by Mr. E. C. Walter of Wallingford complaining of discomfort and difficulty on swallowing. He had an enlargement of the left lobe of the thyroid gland, which was irregular and firm; the gland moved freely up and down on swallowing. There was nothing abnormal in the larynx and œsophageal tubes could be passed without difficulty. He had not lost flesh. His dysphagia thus seemed to be related to the thyroid swelling. The account given of the latter was that it had only been noticed for two months. For the relief of the dysphagia and from the possibility of early malignant disease I advised exploration. The patient entered the hospital on Sept. 10th and the operation was performed on the 15th. A four-inch incision along the anterior border of the sterno-mastoid was made. On exposing the gland the anterior prominence was well marked and it felt elastic. The gland substance for one-eighth of an inch was incised when the grey-coloured adenoma was exposed and enucleated from the front and inner side of the gland. Inside its fibrous capsule was very soft cystic glandular tissue, with one very marked cyst, the anterior prominence, which contained a brown blood-stained fluid and papillary processes from its wall. To the outer side and behind this was felt another hard nodule which was enucleated. This was a more solid adenoma, with minute cysts, of about the size of a filbert. Another hard nodule could then be made out deeply placed towards the back of the lobe pressing backwards on the œsophagus. This was cut down upon and also enucleated and it proved to be almost solid and of the size of a hazel nut. The gland substance was then brought together with fine salmon gut and a small gauze drain was inserted into the bottom and brought out at the lower angle of the skin incision. This was removed after 36 hours and the wound was completely healed by the 22nd. After the operation the patient lost his feeling of dysphagia and he left the hospital quite cured. Although the adenoma had been removed from such a deep site there was no evidence of any interference with the recurrent laryngeal nerve.

In dealing with these adenomata strict conservatism should be adopted. It is quite unnecessary to remove the whole lateral lobe, for in most cases without much difficulty separation can be effected between the thinned-out gland tissue and the tumour. Further advantages of this are obvious. There is less disturbance of the surrounding tissues, so that the operation is not nearly so formidable and the risk of damage to the recurrent laryngeal nerve with the subsequent laryngeal paralysis are practically *nil*. The normal gland tissue left behind can still go on producing its internal secretion. The difference in colour between the reddish thyroid tissue and the greyish colour of the adenoma should be noted so as to define the plane of separation between the two.

Removal with the knife is by far the most satisfactory way of dealing with these adenomata, but less severe measures have been and are advocated. Tapping with or without the injection of iodine and drainage have been used. Simple tapping is merely temporising; it will have to be repeated and the risk of hæmorrhage into the cyst is run. Injecting iodine and drainage may be attended by suppuration, bad enough if limited to the cyst cavity, but in some cases it may burrow in the connective tissue of the neck.

The structure of these adenomata varies from a soft glandular tissue to a more solid fibrous type. In both cysts are met with, single or multiple, and in the former they may occur by the breaking down of the soft tissue and hæmorrhage; rapid enlargement with discomfort would point to the latter occurrence. The more chronic the tumour the greater is the likelihood of its connective tissue basis being dense and fibrous. Marked cicatricial patches may be found like scars through the growth, and in these calcification may occur which process may be also seen in plates on the periphery of the adenoma.

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ISOLATION HOSPITAL ACCOMMODATION.—At the last meeting of the Bristol City Council it was reported that the Health Committee had instructed the city engineer to prepare plans for additional buildings at Ham Green to accommodate 63 patients. This will raise the total accommodation to 200 beds which will still be less than the minimum recommended by the Local Government Board. The cost of the extension is estimated at £24,660.

# A PHARYNGEAL POUCH OF LARGE SIZE REMOVED BY OPERATION.[1]

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THE patient whose case forms the subject of this paper came under Mr. Godlee's observation accidentally on May 18th, 1900. He had then a swelling which looked exactly like an enlarged gland on the left side of the neck at the level of the hyoid bone in front of the sterno-mastoid. It was, however, soft and on percussion gave a tympanitic percussion note and was clearly anchored to the top of the larynx, the movements of which it followed during deglutition. On squeezing it a squeaking sound was produced and a most uncomfortable sensation was experienced by the patient which shot up to the ear and which lasted for some days. The pressure caused an obvious diminution in the size of the tumour. It was clearly, therefore, a case of pharyngeal or possibly œsophageal pouch. He was seen once more during the next few days, and in view of the serious symptoms that usually, sooner or later, are said to supervene in these cases, he was urged to allow the pouch to be removed while it was still small, but he could not at this time make up his mind to accept this advice. He was not seen again until Dec. 31st, 1900, when he was admitted to University College Hospital, and the following history was elicited. The patient, who was 31 years old, had been in the habit of smoking to excess and had habitually taken more alcohol than was good for him. Twelve years previously he had received a blow from a fist on the left side of the neck which was painful, but which was followed by no special symptoms at the time. Two years later he began to feel something working up and down the left side of the neck on swallowing. It was not always present, but occurred from time to time, but no fresh symptoms occurred until about three years ago. During the last three years he had been liable to acute attacks, lasting usually about a fortnight, during which a lump developed at the left side of the neck and swallowing became difficult and painful, until at last he could only swallow liquids. At the end of the attacks the lump disappeared, sometimes gradually, sometimes suddenly during the night. He had had about seven such attacks and also slighter ones which he had cut short by squeezing the lump which always caused the expectoration of a quantity of phlegm, and almost daily he had coughed up what he described as "a piece of flesh," about one inch long and curled up, which sometimes stuck in his throat and caused him to choke and vomit. A full feeling in the neck warned him some 20 minutes before the commencement of an attack. The last attack began on Dec. 21st and resulted in a much larger and more painful swelling than had ever occurred before, and the skin for the first time became red over the swelling, though the redness was evidently not inflammatory. On admission the swelling reached the middle line in front and the posterior border of the sterno-mastoid behind, overlapping and pressing back this muscle. It reached upwards to a point just above and behind the angle of the jaw, and downwards to the clavicle, the upper border of which it just overlapped. He said that it had extended still further back a few days previously. It projected fully one and a half inches from the normal surface of the neck. The tumour was very painful and tender, the skin was moveable over it, and it was freely moveable over deeper parts, except near the upper part of the larynx, to which it was fixed, and at which part it appeared to be thickened, though the rest of the swelling was evidently a very thin-walled cyst. The carotid vessels passed behind it. The percussion note all over it was tympanitic. When he held his breath and blew he could slightly inflate the tumour, which procedure produced

[1] The clinical part of this case is described by Mr. Godlee, the pathological for the most part by Mr. Bucknall. Read at the Royal Medical and Chirurgical Society on May 14th.

a slight change in the percussion note. There was no enlargement of the cervical glands and no sign of pressure on nerves, though the voice was harsh and metallic. A laryngeal examination showed the parts to be normal and that the cords moved freely. The temperature was normal.

*Operation.*—The pouch was removed on Jan. 2nd, 1901, by a long incision over the most prominent part of the tumour. It was a delicate matter to dissect the thin skin from the surface of it, and whilst doing so the lump collapsed. It was not apparent that the wall had been pricked, but it is possible that this may have been the case. The anterior border of the sterno-mastoid (with the spinal accessory nerve entering it) was drawn back and the thin lower part of the cyst was then opened in order to make it easier to dissect it from the subjacent structures. The dissection was less difficult when the thicker upper part of the pouch was reached and this was found to consist of two portions communicating by a rather small opening. At last the narrow pedicle was reached which passed through the thyro-hyoid membrane, but very careful probing failed to discover the actual communication with the pharynx. The superior laryngeal nerve was not seen. The thyro-hyoid was stretched over this deeper part of the cyst which lay altogether in front of the large vessels. The tubular pedicle was then secured by catgut stitches, a fresh portion of it being divided as each stitch was passed. Finally, the stump was invaginated by four stitches passed after the manner of Lembert's sutures, and the larger wound was closed except immediately over the site of the pedicle, where a small plug of gauze was placed in case the stitches should give way. The wound, however, healed perfectly, complete asepsis being maintained; the last part of the plug was removed on Jan. 12th, and healing was complete on Jan. 19th. The temperature remained normal throughout.

A careful examination of the pouch after removal was made by Mr. Bucknall. The wall of the smaller upper portion was three millimetres thick, that of the lower larger part varied from one to six millimetres. The structure of the wall was fibrous, without any muscular elements except where some fibres of the platysma were incorporated with the outer surface. The lining was throughout glistening. That of the larger sac fell into folds like those seen in an hypertrophied bladder, but that of the smaller part was almost smooth, though showing this tendency to rugosity to a less extent. Microscopically the outer part of the wall was made up of dense fibrous tissue with few nuclei. Within this was a layer of more nuclear connective tissue with numerous dilated venules, and in part showing signs of recent inflammation. On this, and resting on a definite basement membrane, lay the remains of the lining epithelium, which had in most parts desquamated and was only to be found intact in the deeper crypts. Where perfect this consisted of about from three to six layers of columnar cells with oval nuclei, the superficial layers being ciliated. The deeper layers, which alone remained over the greater part of the inner surface, were columnar or cubical; the superficial ones were long and regular, and ciliated with definite free borders united to form a plane inner surface to the sac, where they were not shed or concealed by débris. The inflammatory cells, which had in parts burst through the basement membrane, had evidently been the cause of the desquamation. Close beneath the epithelial lining lay several nodules of lymphoid tissue, and here also at one spot a group of acini were cut across, resembling in every detail of their structure a mucous salivary gland. The large cubical cells composing the lining of each acinus displayed various stages of secretive activity. A few ducts were also visible.

It is possible to obtain records of nearly 200 cases of pharyngeal pouch and fistula. They probably all arise in connexion with one or other of the visceral clefts, and the following varieties occur which depend upon the position of the obliteration of the cleft: (1) it may remain open throughout its entire length, giving rise to the complete fistula opening into the pharynx and on the side of the neck; (2) no external opening may be formed and a pharyngeal pouch with a blind extremity may remain; (3) the internal aperture may become shut off from the pharynx leaving a blind external fistula; and (4) both internal and external openings being closed a "dermoid" cyst of the neck may remain. In more than a third of all the cases the fistula was complete, and of the remainder the majority presented an external fistula, either blind or with the internal orifice so concealed that it could not be found. In several a pharyngeal pouch was observed to burst externally, giving rise to the formation of a complete fistula; and conversely the external orifice of a fistula has been known to close, giving rise to a pharyngeal pouch, or the internal orifice once patent has become occluded and a blind external fistula has remained.

These facts point among others to the unity of origin of the various conditions. The internal orifice, when present, has always been found in the pharynx, and not, as at one time was stated, in the larynx. This has been proved by dissection in three cases, by passing the probe in 12, by the laryngoscope in three, and by injection from below in 17 cases. It is usually small and, like the orifice of Stenson's duct, situated on a small papilla, but in one case it was large enough to receive the last joint of the finger. In those cases in which its anatomical position has been accurately defined it opened on the side wall of the pharynx close to the margin of the tonsil, and frequently in connexion with the fold of the palato-pharyngeus.

The external orifice, if it exists at birth, is situated at some point along the anterior border of the sterno-mastoid; it is single and is sometimes guarded by a subcutaneous nodule of embryonic cartilage. The most common position is just above the sterno-clavicular articulation, but it may be found at some higher point along the anterior border of the sterno-mastoid, and it has been noted opposite the cricoid on a level with the top of the thyroid close to the great cornu of the hyoid bone and opposite the angle of the jaw. If it results from the bursting of a dermoid cyst or pharyngeal pouch, as a rule it is still generally situated at the edge of the sterno-mastoid, but the pouch may have reached some other position before it burst and several external fistulous apertures may in some cases be formed.

Where a complete fistula exists some varieties in its relation to surrounding parts have been noted, but in a general way it may be said to arise from the pharynx, near the great cornu of the hyoid bone, and to run down with the carotid vessels beneath the sterno-mastoid as far as the external orifice. Pharyngeal pouches and blind external fistulæ, as a rule, follow the same course.

The lumen of the canal is usually small and its course is tortuous, especially above, and the whole pouch or fistula may form little more than a fine cord-like band extending down the neck. But in those cases in which no external orifice exists, or in which such orifice becomes blocked or closed, there is a tendency for distension to occur, and a swelling is then formed in the side of the neck which may possess the typical features of a pharyngeal pouch—that is to say, it forms a thin-walled, resonant, globular tumour, moving with deglutition, perhaps becoming more tense on forcible expiration, and capable of reduction in size on pressure. It is very rare for food to pass into the cyst, as usually happens in cases of true œsophageal pouch; it is, however, common for mucus to be expectorated, as happened in the present case.

It is interesting to try to determine which of the visceral clefts is concerned in the development of such a pouch. But the problem is a difficult one, and the difficulty is increased by the uncertainty existing at the present time with regard to the structures that correspond to the particular clefts and arches; and it must be added that, as neither of us is a skilled embryologist, all information on these matters had to be taken at second hand.

It is generally held that in the first (or mandibular) arch the lower jaw is developed; in the second the styloid process, the stylo hyoid ligament, and the small cornu and part of the body of the hyoid bone; and in the third the great cornu of the hyoid bone. The relation of the larynx to the visceral arches has not been determined. As the neck of this pouch passed through the thyro-hyoid membrane it is clear that it could not have been connected with any cleft above the third. It remains to be seen whether, supposing it was connected with the third, it bears a right relation to vessels and nerves.

The relation of nerves to the upper clefts is held to be constant and is shortly as follows. The nerve that is associated with each cleft divides at the dorsal end and is distributed partly to the arch above (anterior) and partly to the arch below (posterior). Thus the seventh nerve is distributed partly to the first arch and partly to the second; the ninth (glosso-pharyngeal) partly to the second and partly to the third; and the tenth (vagus) partly to the third (external laryngeal) and partly to the fourth arch and to lower parts of the body. Unfortunately, the position of the

external laryngeal was not ascertained at the time of the operation; the main trunk of the vagus was certainly behind the neck of the pouch. It is not possible, therefore, to say whether the external laryngeal was in front of the neck, as it ought to have been if the pouch were connected with the third or some lower cleft; it is, however, almost certain that it did occupy this position.

The relation of the carotid arteries to the clefts is not yet definitely settled, and the issue is confused by the fact that the embryo of the chick has been so much employed in the study of embryology and that the development of the carotids does not appear to be the same in birds as in mammalia. Another source of confusion arises from the fact that the vessels are displaced downwards (towards the thorax) in the course of development.

According to many good authorities, the external carotid is developed from the ventral aortic vessel and thus passes in front of the visceral arches, the internal carotid from the third arch and that part of the dorsal aortic vessel which is above (anterior to) it. If, then, this pouch were developed from the third cleft its neck ought to have passed behind the two carotids. But such was not the case. Both carotids were behind the neck and only one explanation suggests itself—that the pouch was quite small at the time when the vessels were being displaced downwards (towards the chest) and that in its subsequent growth it pushed up in front of the external carotid.

If we turn to the descriptions of other observers it is found that it is not infrequent for the neck of the pouch to pass between the external and internal carotids and that the relation of some of them to the second cleft appears to have been clearly made out. Thus König, Watson, Heuter, Rehn, Tricomi, and Gussenbauer all noted that the canal passed beneath the lower border of the digastric, and Watson and Heuter traced it between the external and internal carotid arteries to the pharynx, the seventh nerve lying above it and the ninth nerve and the stylo-hyoid ligament below it. This seems to have been the course of the canal in the very few cases that have been dissected post mortem. Some others have been traced into the same position by operation, but though a few others, like the present case, have been traced up to the thyro hyoid membrane in operation the exact position of the internal opening has not been ascertained. In Watson's case a branch of the ninth nerve innervated the walls of the pouch and in the case recorded by Berger probing of the fistula caused cough and stopping of the pulse and other symptoms of distress thought to be due to irritation of the superior laryngeal nerve. In Cavazzani's case vomiting followed the use of the probe. In most cases the walls were found to consist of fibrous tissue and striped muscular fibres have been noted by some observers. The lining epithelium was either of the stratified flattened variety or columnar and ciliated as in the present case. König noted two canals side by side, one lined with flattened and the other with columnar ciliated epithelium, and other observers have described pouches lined with flattened epithelium below and columnar and ciliated at the upper part—that is to say, the part of the pouch nearest to the pharynx.

The facts pointing to the congenital origin of pharyngeal pouches and fistulæ and to their probable connexion with the visceral clefts may be summarised as follows. 1. They are frequently hereditary. 2. They are often bilateral. 3. Though they often do not appear till early adult life they may be present as fistulæ at birth or very early in life, and it is probable that they are often overlooked, as the symptoms they give rise to are slight and may take some time to develop. 4. The peculiar course of the canal. 5. The presence of a lining of ciliated epithelium, although they are derived from a portion of the pharynx normally covered with squamous epithelium. 6. The fact that the neck of the canal or pouch often passes between the carotids in the position of the second visceral cleft. 7. The fact that striated muscle has been found in the wall of such pouches and fistulæ, and that in one case a band of striated muscle ran from the end of the pouch down the course usually pursued by complete fistulæ. 8. The fact that in several cases glands having a similar structure to the normal mucous salivary glands have been found opening into the lumen of pouches and fistulæ. This may account for the discharge noted in cases like the present. One of us has met with an instance, many years ago, of a cyst, then supposed to be developed in connexion with the bursa beneath the hyoid, which was, however, lateral in position, and which it was found impossible to dissect out. The patient, who was under the care of Lord Lister, was a distinguished advocate, and he was much troubled after the operation by a mucous discharge from the fistula which occurred when he was speaking in court. The fistula, after many years, closed. 9. The fact that around the lumen a considerable quantity of lymphoid tissue was noted by König in three cases and also by others, while cartilage has occasionally been met with in the walls of such fistulæ.

As this pouch was obviously of the pharyngeal variety no reference is here made to the so-called pressure pouches of the œsophagus, but it is at least possible that some of these should be placed in the same category.

*Bibliography.*—The following references include nearly all the recorded cases. The writings giving most information on the subject are marked with an asterisk. * Kostanecki and von Mielicki: Archiv für Pathologische Anatomie, 1890, cxxi., pp. 55 and 247, containing a summary of all cases up to the year 1890. Sachs: Jubiläum von Theo. Kocher, Wiesbaden, 1891, p. 63. Hektoen: Chicago Medical Record, 1891, ii., p. 123. Tietze: Zeitschrift für Chirurgie, Leipsic, 1891–92, xxxii., p. 421. Tricomi: Riforma Medica, Napoli, 1891, iii., p. 541. Cavazzani: Riforma Medica, Napoli, 1891, iv., p. 31. * Paci: Sperimentale, 1891, xlv., p. 425. * Lejars: Progrès Médical, Paris, 1892, xv., pp. 113–117. Berger and Fevrier: Bulletin de la Société de Chirurgie, Paris, 1892, xviii., pp. 75–80. * Gussenbauer: Beiträge zur Chirurgie, von Billroth, 1892, pp. 250–286. Arndt: Berliner Klinische Wochenschrift, 1892 p. 532. Shattock: Transactions of the Pathological Society of London, 1892, xliv., p. 62. Schlange: Archiv für Klinische Chirurgie, Berlin, 1893, xlvi., pp 300–392. *Karewski: Archiv für Pathologische Anatomie, Berlin, 1893, cxxxiii., pp. 257–269. Buscarlet: Revue Médicale de la Suisse, 1893, xiii., p. 1. Sulicka: Thèse doct., Paris, 1893–94, No. 492. Parker: Bristol Medico-Chirurgical Journal, 1893, xi., p 1. Hamann: Cleveland Medical Gazette, 1893–94, ix., pp. 110–112. *Giordano: Riforma Medica, Napoli, 1895, xi., pp. 530–544. Kopfstein: Wiener Klinische Rundschau, 1895, ix., p. 41. Lichtwitz: Gazette Hebdomadaire de la Société de Médecine, Bordeaux, 1895, xvi., p. 471. König: Archiv für Klinische Chirurgie, Berlin, 1896, li., pp. 578–618. Kontnik: Gazette Hebdomadaire, Paris, 1896, xliii., pp. 1216–1218. Binnie: Kansas City Medical Index, 1897, xviii., pp. 49–53. Von Hacker: Centralblatt für Chirurgie, Leipsic, 1897, xxiv., pp. 1073–1076. De Stella: Annales de la Société de Médecine de Gand, 1898, lxxviii., pp. 174–181. *Sultan: Deutsche Zeitschrift für Chirurgie, Leipsic, 1898, xlviii., pp. 113–155. Vaughan: Brit. Med. Jour., 1899, i., p. 148. *Nieny: Beiträge zur Klinischen Chirurgie, Tübingen, 1899, xxiii., pp. 89–108. Pouches similar in many ways to the one forming the subject of this paper are described by Watson, Pertick, Zuckerkandl, Kirchner, Schmidt, Kostanecki, and Kopfstein. The references of the first six will be found in Kostanecki's paper mentioned above.

# FLIES AND THE SCIENCE OF SCAVENGING.

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IN the recent debate[1] at the Clinical Society of London on Dr. H. H. Tooth's paper[2] on Enteric Fever in South Africa it was established: (1) that the number of flies in our camps was prodigious; and (2) that these flies were largely a result of the military occupation. There seems also to have been a very general consensus of opinion (3) that flies may convey infection. It becomes therefore of great importance to consider the genesis of flies; and I trust that one who has no claims to be considered a dipterologist may be pardoned for recalling a few common facts.

Flies multiply at a prodigious rate. Given a temperature sufficiently high to hatch the eggs, their numbers are only limited by the amount of food available for them. Linnæus is credited with the saying that three meat-flies, by reason of their rapid multiplication, would consume a dead horse quicker than would a lion, and the fact that certain diptera having some outward resemblance to the honey-bee lay their eggs in the dead carcasses of animals probably led Samson and Virgil to make erroneous statements with regard to the genesis of honey and the manufacture of bees. The breeding of "gentles" for ground-bait is an industry the practisers of which could probably give much information as to the nicety of choice exercised by flies in selecting material for feeding and egg-laying. According to Packard the house-fly makes selection of horse-dung by preference for ovipositing, and as each female lays about 120 eggs and the cycle of changes from egg to fly is completed in less than

[1] THE LANCET, March 16th, p. 786, and 30th, 1901, p. 932.
[2] THE LANCET, March 16th, 1901, p. 769.

three weeks it seems probable that a female fly might have some 25,000 000 descendants in the course of a hot summer. Other varieties of flies multiply, I believe, still more rapidly.

As flies multiply upon, and in, organic refuse of every kind it is obvious that the sooner such refuse is placed where it cannot serve for the feeding and hatching of flies the more likely is the plague of flies to be lessened. The most commonly available method for the bestowal of organic refuse is burial. The egg-laying of flies in dead carcasses commences at the very instant of death, or even before death in the case of enfeebled animals. This fact has been insisted upon by Megnin in "La Faune des Cadavres" and appears to be true of human beings dying from fever. It is obvious, therefore, that there must be no delay in the burial of organic refuse and that the burial of animals and excreta is quite as important as the burial of human beings. After a great battle it may not be possible to follow this advice, but nevertheless there can be no harm in insisting that the instant burial of all organic refuse must be the aim of those who are called upon to guard the public health, whether military or civil.

It is impossible to lay down any line of action which shall be the best under all circumstances, and those who, like myself, have not been through the South African campaign are incompetent to deal with the special circumstances of that campaign. Nevertheless, I am of opinion that much that I have witnessed on Salisbury Plain in connexion with camp-scavenging is bad and is not calculated to teach the soldier the right principles of dealing with organic refuse which is always his most dangerous enemy. The science of scavenging requires to be taught. If the duty of scavenging be left to the ignorant and be controlled by persons who think that necessary details are beneath their notice then annoyance and disease are the only results possible.

If the scavengings of a camp are to be satisfactorily dealt with the question of their ultimate disposal must be ever present in the mind of the scavenger. The materials collected have to be burnt, to be buried, or to be otherwise dealt with. The mere dumping of refuse in mixed heaps ought certainly to be abandoned and the contents of the latrines ought to undergo immediate superficial burial at the nearest available spot in order to avoid cartage and spilling. In many cases it should be possible to bury the excreta in the immediate vicinity of the spot where they are dropped. We hear of excreta being buried in trenches 10 feet deep, but such a course must mean that they are left exposed to give off odours and to breed flies for many hours before they are under ground and covered up. I have consulted a gravedigger on this question and asked him, "If you were ordered to dig a grave 10 feet deep what breadth and length would be necessary and what time would you require?" His reply was that (in chalk) the grave would have to be six and a half feet long and three and a half feet wide, and that he would require a day and a half to complete the work. It is certain that 36 or 48 hours' delay in the disposal of fæces is most undesirable. I have always advocated the burial of fæces in shallow furrows rather than in deep trenches, and, in this country at least, where alone I have had experience, I am convinced that this is the only reasonable course to pursue. If properly done all offence to eyes or nose is thus ended and the fæces cease to attract either flies or rats. The fæces can be covered continuously as soon as they are dropped and there is no need of having malodorous open trenches partially filled which are waiting to be completely filled before being covered up.

This burial of fæces must be done methodically and carefully and with every attention to detail. The proceedings must be precisely those of a gardener who is intent upon raising crops. The fact that in war the crops may never be harvested is quite beside the mark and affords no excuse for slovenly procedures which are a danger to health. Nitrification in the soil is the aim equally of the sanitarian and the agriculturist. If a plot of ground 50 yards long and 50 yards wide—slightly more than half an acre—be allotted for the disposal of fæces this should be marked off into, say, 16 strips, each about eight feet wide and 50 yards long, with a narrow path of about 18 inches between each strip to allow for watering and cultivation. The line of the furrows must be accurately marked by a cord and reel in the ordinary way, and the digger must move continuously backwards in order to avoid trampling on the freshly dug ground. The making of the furrows should commence at the point furthest from the latrines and it should gradually come nearer to them. The earth removed from the first furrow should be wheeled down near the latrines where it will be ultimately wanted to cover the last furrow which is dug. The capacity of the furrow or little trench will depend upon the size of the spade. I find that, working in ordinary garden soil with a spade having a blade nine inches long and seven inches wide (the furrow being consequently nine inches deep and seven inches wide), eight stable-bucketfuls of soil each holding two and a half gallons, or about 22 pounds weight of earth, were removed. This amounts to two and a half bushels of soil, weighing 176 pounds, as the measure of the capacity of a trenchlet eight feet long. This trench must be filled with excreta and great care must be taken that nothing except fæces and paper and the accompanying urine is placed in it. If broken crockery or old tins are accidentally mixed with the excreta they must be removed. The trench being filled with fæces, mark out a digging line at a distance equal to the width of the spade (seven inches) behind the edge of the first trench and then cover the fæces in the first trench by the earth removed in making the second. Owing to the draining away of urine and moisture and their great compressibility it will be found that the excreta undergo a considerable diminution of bulk when tipped into the trench. When the earth of the second trench has been removed and shovelled on to the top of the first trench it will be found that there is a raising of the general level of the ground and the second trench will be found to have a cross section which is rather triangular than rectangular owing to the oblique direction of its front wall which is composed of a sloping bank of friable earth. The surface of the ground must be left crumbly, smooth, and perfectly neat, like a well-prepared garden bed. No particle of fæces or paper must be left uncovered. There will be no offence to eye or nose, no putrefaction is possible and the fæces are beyond the reach of dipterous insects, and if there has been no delay in the collection and burial of the fæces they cannot have been used for oviposition to any great extent, so that the soil will not become infested with "grubs."

How many men will provide the quantity of fæces which can be placed in a trench eight feet long from which 176 pounds weight of earth have been removed? The answer to this question is governed by bulk rather than by weight. If fæces and earth were equal in bulk for equal weights and if we allow a quarter of a pound of fæces for each man—for the urine soaks away and *quâ* bulk may be neglected—then the answer would be $176 \times 4 = 704$. If the fæces are weight for weight four times as bulky as the earth, the answer is 176. In any case it seems safe to say that a trench eight feet long, nine inches deep, and seven inches wide will suffice to take the fæces of 100 men. This estimate entirely accords with my experience gained in my garden at Andover where the fæcal accumulations of 20 cottages have been disposed of daily in the manner indicated for 18 years and where it takes at least five years to cover an acre of ground in this way. Those who have not had experience of this method of dealing with fæces are apt to have exaggerated views as to the amount of land required. If a trench eight feet long and seven inches wide is sufficient for the disposal of the daily quota of excreta from 100 men, then 10 such trenches occupying an area of eight feet by 70 inches—say six feet—is enough for 1000 men and one strip of ground 50 yards long and eight feet wide would serve for a regiment of 1000 men for 25 days, and the 16 strips would serve for 400 days—let us say half an acre per annum per 1000 men. The actual area necessary will depend to some extent upon the nature of the soil and the care and skill of the scavenger, but in no case can the area required be regarded as a bar to the process—certainly not on the veldt or on Salisbury Plain. It need not be insisted on that a scavenger must be incessantly at work. The excreta should be taken up as soon as dropped and be placed in a covered pail, and the pail when full should be emptied into the furrow and covered up. In this way effluvia are stopped and oviposition by diptera is rendered impossible. Further, this method of disposing of fæces necessitates no increase of the impedimenta of an army; no lime or chemicals are needed and no apparatus beyond a spade and a set of garden tools.

The ground beneath which the fæces are deposited should when the work is done have the appearance of a well-prepared garden bed and it will need a little attention until it is covered with herbage of some kind. The only question remaining to be decided is as to what that herbage should be. There can be no camp without water-supply, and in every camp one of the sanitary problems is the disposal of waste water. Some of this waste water should be used in

time of drought for laying dust and encouraging fertility in that small area of ground beneath the well-tilled surface of which the fæces are safely bestowed. Then, the higher the temperature the quicker will the ground bring forth green leaves to freshen the air. Whether the crop be grass, cabbage, cereals, onions, mustard and cress, lettuces, spinach, or what not must depend upon circumstances. I think the seeds sown in such ground should always be those of culinary vegetables which may prove a real blessing if the camp be long occupied. With a little care in a hot climate one may have a green covering of grass or mustard and cress in a week which at least will give off oxygen to the air even if it do not serve as an anti-scorbutic diet for man and beast—a diet which may just supply that something which is lacking in tinned and salted provisions.

In a temporary camp these methods of excrement disposal are the best on the grounds of immediate hygiene. In places like Salisbury Plain which are to be used as camping grounds year after year, latrine gardens are essential and, if properly managed, should furnish a good many acceptable extras for the canteens. Last year at Perham, on Salisbury Plain, there was a field of many acres occupied by the scavenging contractor and placed a few hundred yards from the camping ground. On this were piled heaps of camp refuse, old tins, meat bones, broken victuals, packing materials, and fæces which had been "dumped" with a view to burning when dry enough. In their recent state these heaps (in which flies were swarming) could be smelt for a quarter of a mile down wind and when they began to burn the offensive smoke drifted still further and not seldom over the camps themselves. This haphazard method of "dumping" refuse in pestiferous heaps is not economical, not even from the point of view of the area of ground required, and would be rendered unnecessary by a little care in collection and the judicious use of the spade by men who knew how to turn these despised materials to profitable account. Horse-dung in the same way should be neatly stacked in heaps like hotbeds, protected at the sides and covered with earth. In this way the flies would be prevented from feeding and egg-laying on the dung, large quantities of saladings might be produced, and when the camp was moved this well-rotted material should be applied to the camping ground with a view to the renovation of the turf. On Salisbury Plain the growth of summer is trodden under foot and there is no systematic renovation in the winter. On turf downs the actual camping ground should be changed every year and the ground "top dressed" as soon as the camp breaks up in the autumn. Without careful management and good husbandry these downs will soon be trampled and scuffled into a dusty wilderness. In the same way all the kitchen refuse should (after utilisation to a maximum extent in the stock-pot, &c.) be neatly stacked, protected at the sides, and covered with earth. All organic refuse should be completely protected by soil from the attacks of diptera and its fertilising properties should be utilised forthwith.

It is sometimes said that we ought to be ready to forgive the house-flies for the annoyance which they cause to us because of their great services as scavengers; but I am rather inclined to take the view that the presence of flies is a reproach to us for not putting organic refuse to its proper use, and that the fly is a robber which has been bred in material which we have deliberately allowed to lie above ground instead of covering it with soil. The scrupulous sweeping up of crumbs and food particles immediately after meals and the instant removal of the remains of food to fly-proof larders need not be insisted upon. I believe that a great advance in domestic hygiene will have been made when the custom is more general of removing dung every day from our stables, piggeries, cattle-sheds, and poultry-runs, and stacking it carefully so as to prevent the access of diptera, or burying it immediately beneath the surface of well-tilled soil with a view to the production of crops. We pity the horse "turned out" in a paddock when we see it tormented with "flies." Few of us pause to think that if the horse-dung had been collected daily and put to more profitable use instead of being allowed to lie about and generate a plague of flies the animal might have been happier and the dung might have been more valuable for fertilising purposes. When flies breed in dung-heaps the larvæ eat the dung and leave the straw. If each fly needs one grain only of sustenance then the 25,000,000 which I have stated as the possible season's progeny of a female house-fly will be capable of robbing a farmer of 25,000,000 grains of fertilising material, which at 7000 grains to the pound works out at 3571 pounds, or considerably more than one and a half tons. It is bad economy to have your scavenging done by flies and sad to see your potential wealth make to itself wings and fly away. In my garden at Andover where human excreta have undergone daily superficial burial for about 18 years there is no excess of flies and I have come to the conclusion that an essential part of garden management is the daily collection of all garden offal, such as dead leaves, fallen and rotten fruit, &c., and either superficially burying or stacking it so that it shall not serve as a breeding-ground for insects which often prey upon the plums and peaches in the autumn.

In the management of refuse I am no advocate for the use of chemical disinfectants. These are expensive, generally evil-smelling, often poisonous, and lead to an increase of material to be transported. The soil is quite capable, with proper management, of turning all organic refuse into "soil"—a fact which the experiments of Sir Seymour Haden and myself have abundantly proved. Our experiments have also shown that from the point of view of the innocuous transformation of organic refuse into "soil" deep burial is a mistake. This is true alike of dead animals and of excreta. We are happily hearing less of the pollution of the earth and of the growth of microbes and toxins in the soil and even from the laboratories of bacteriologists we are learning that the soil is our best friend. The use of quick-lime in the treatment of excreta is, I believe, quite unnecessary. My experiments in burying small animals tend to show that the quick-lime preserves the body and mischievously prevents the beneficent action of the soil. In the management of refuse there must be no slovenly "dumping." What is wanted is proper sorting at the time of collection, great attention to detail, absolute neatness, and an appreciation of the ends to be attained.

In recommending the immediate collection of all organic refuse and its instant covering with earth I am making no new recommendation. Moses had had experience of a "plague of flies" in Africa and was no novice in the matter of camp-management. He found it necessary to be most explicit in his directions for the treatment of excreta. These directions are given in Deuteronomy xxiii., 12–14, and I find that in the revised version of the English Bible there is an interesting change in the passage. The old version runs thus:

> Thou shalt have a place also without the camp, whither thou shalt go forth abroad:
> And thou shalt have a paddle upon the weapon; and it shall be, when thou wilt ease thyself [sittest down] abroad, thou shalt dig therewith, and cover that which cometh from thee:
> For the Lord thy God walketh in the midst of thy camp, to deliver thee, and to give up thine enemies before thee; therefore shall thy camp be holy: that he see no unclean thing in thee [nakedness of anything], and turn away from thee.

The new version says (verse 13): "Thou shalt have a paddle *among* thy weapons," and as a variant for paddle gives "shovel" in the margin. The passage, therefore, means that a shovel for burying excreta immediately is a necessary implement in every camp.

Portland-place, W.

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A CASE OF

# SYMMETRICAL RETINAL DETACHMENT OCCURRING DURING LABOUR AND ASSOCIATED WITH ALBUMINURIA RESULTING IN COMPLETE RECOVERY.

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AND

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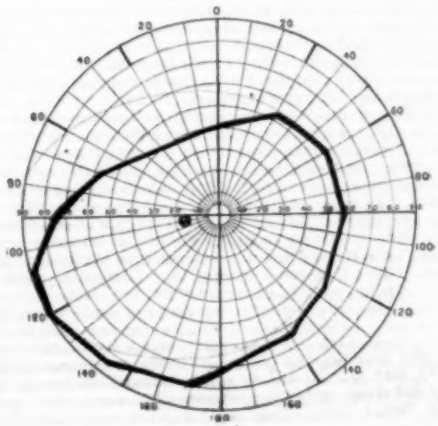
THE onset of sudden blindness during labour is a symptom which would naturally excite attention, but perhaps from the fact that a large majority of these cases recover vision and from the attendant circumstances the ocular conditions are not often investigated at the time. This no doubt accounts for the paucity of recorded cases. One cause of blindness during labour is retinal detachment in association with general œdema or eclampsia. The connexion of these

two conditions with renal disease is generally accepted, but retinal detachments occurring during labour run a very different course from that of detachments occurring in the course of renal retinitis. The former end in recovery; the latter are usually a prelude to a fatal issue. The following case is a contribution to the subject.

The patient was a woman, aged 21 years, who, with the exception of scarlet fever in childhood, had had no illness until her first confinement on Nov. 25th, 1900. When first seen she had been in labour for 24 hours; the pains were severe and prolonged, recurring at intervals of about five minutes. There was œdema of the face, hands, feet, and legs, and according to the friends this had been present for about three weeks. For three hours the pains continued with great intensity, then the patient fell into a state of semi-coma with stertorous breathing, from which she would be roused by the pains; shortly before the onset of this condition she complained of inability to see, and from her actions it was obvious that she was quite blind. So far as could be gathered this blindness was of sudden onset. Forceps were now applied and the labour was terminated. The following day she remained semi-comatose, and for 30 hours from the birth of the child no urine was secreted. On the 27th she was conscious, dull, and lethargic, and she passed a small quantity of urine containing much albumin, though owing to the puerperal state this observation is of uncertain value. Under atropine an ophthalmoscopic examination of the eyes was made. In both very large and obvious detachments filled up the lower third of each globe. They were symmetrical in appearance and bilobed in outline, owing to a depression in the middle. They floated up readily on the slightest movement of the eye and had all the usual characters of detached retinæ. The discs, which were just clear of their summits, had defined edges, but were surrounded by an œdematous pallor. Though the patient was to all intents and purposes blind it was elicited that some kind of vision was present, but she was too drowsy and too easily tired for prolonged examination. Her general condition after this date rapidly improved; the œdema all disappeared in the first week, the drowsiness passed away and she became brighter and more intelligent. During the whole period that she was under observation, however, a trace of albumin was always to be found in the urine. On Dec. 22nd an examination of the eyes was made, the pupils being dilated with atropine. The retinal detachments were no longer to be seen. Close to the ora serrata in the lower part of the right globe it was just doubtful if the retina was yet completely reapplied. Through the retina at this spot, however, pigment patches could be seen and if any projection of the retina that could be called detachment existed it was evident, notwithstanding the difficulty of examining a part so far forward, that it was very trivial. With this qualification it may be stated that both detachments had completely disappeared. The edges of the discs were slightly blurred and swollen, but their physiological cups were well marked. There was very slight tortuosity of some of the vessels. Scattered over the fundus in both eyes was a general but an irregular distribution of pigment granules, spots, and patches, and the latter in places, and especially in the right macular region, were confluent. The pigment spots were much deeper in colour than were the patches. Vision: right eye with + 1·5 D. = $\frac{1}{12}$; left eye with + 1·5 D. = $\frac{1}{12}$ (one letter). The fields showed definite symmetrical contractions in the upper hemisphere—no doubt due to impairment of function dependent upon the recent detachments. The urine was acid and of specific gravity 1012. A ring of albumin was observable and there was a trace of sugar (?). No casts were found. Jan. 8th 1901.—Vision: right eye = $\frac{6}{9}$ (two letters); left eye = $\frac{6}{9}$ (several letters). No improvement could be gained by glasses. On the 9th, with the pupils widely dilated with homatropine, it was seen that all traces of the remnant of the detachment in the right globe had completely gone. The fields were unaltered, still showing the limitation in the upper hemispheres.

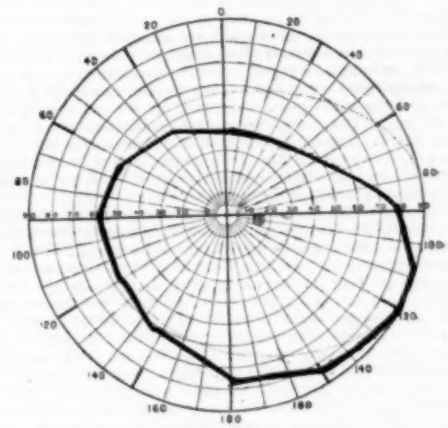
In this case the influence of labour in producing the detachments was unmistakeable. Under less trying circumstances the interior tunics of the eye are probably protected from the œdema which is present in the other tissues by the intra-ocular tension. During the labour pains the return of the venous blood must be retarded and a considerable back pressure must be put upon the capillary circulation. For three hours at least before the development of blindness in the case recorded this intermittent retardation had been going on every five minutes, and though no increase of the general anasarca was noticed—a point that might easily escape observation—it is not difficult to imagine that, so far as the eyes were concerned, the relation between the intra-capillary and intra-ocular tension was so modified as to lead to an effusion of serum into their tissues. This effusion must have been far more copious in the choroid than in the retina, owing to the very great difference in vascularity between the two structures, and the fluid poured out behind the retina and gravitating, as is customary, to the lower part of the globe, would float the retina up upon its surface. With the passing away of the exciting cause the natural relation between the blood-pressure and the ocular tension would

FIG. 1.



Perimeter of right eye.

FIG. 2.



Perimeter of left eye.

return, absorption of the dropsical fluid would take place, and the retina would become reapplied. Given the general tendency to œdema dependent upon the renal disease the mechanical conditions affecting the circulation induced by the strains of the labour were probably quite sufficient to account for the detachments. There is no reason to suppose that there was any renal retinitis present. Nothing that could be described as such was noticed on the second day after delivery, and the alterations in the fundus seen at a later date were doubtless the result of the disturbance to which the choroid and retina had been subjected.

We are aware of only one case that definitely resembles the one just related. It is recorded by Adamuk. In it binocular detachments occurred during severe eclamptic

attacks in the eighth month of pregnancy. Premature delivery was followed by spontaneous recovery.[1]

In a clinical lecture on "Pregnancy Nephritis" Dr. Reginald Southey[2] has recorded a case of detachment of the retina occurring about the time of delivery which forms a most instructive contrast to the foregoing case. A domestic servant, aged 23 years, was admitted to St. Bartholomew's Hospital with general dropsy of three weeks' duration. There was albuminuria and in the course of a week she had become nearly blind, both discs being swollen and red. Five days after admission (Feb. 14th, 1882) she was delivered of a dead fœtus, "but in consequence probably of labour pains and straining there was slight hæmorrhage in each upper eyelid and the conjunctivæ were very œdematous." On Feb. 18th there was found in the right eye a patch of white effusion near the disc and extensive detachment of the lower half of the retina in the form of three large cusps. In the left eye were two hæmorrhages. On March 6th no trace of the detachment in the right eye could be discovered, but there were optic neuritis, several patches of effusion here and there, and some pigmentation which was most marked where the detachment had been. The albuminuria disappeared a week after delivery and the patient was discharged well on March 15th with no complaint about her sight and able to read the daily papers.

Now *the blindness* in Dr. Southey's case did not come on suddenly during labour but had been gradually increasing for nearly a fortnight before. It was apparently due to well-marked albuminuric neuro-retinitis which was most advanced in that eye in which the detachment subsequently formed. The part that the actual labour played in the production of the detachment is open to question, but whilst the latter soon disappeared, the retinitis, for a time at least, got worse. Though there were no eclamptic seizures, and from Dr. Southey's account the pains can hardly have been either severe or prolonged, it is nevertheless probable that the latter were sufficient to lead to the detachment in that eye in which the more profound inflammatory changes had prepared the way. In our case the pains were severe, and the detachments were symmetrical, but there was no albuminuric retinitis. From this it will be seen that we incline to the mechanical explanation of the detachments, whether inflammation of the retina is present or not, and regard retinitis as a predisposing cause, but the labour as the exciting one.

Ophthalmic surgeons must be familiar with cases in which a history is given of eclamptic attacks and of blindness following confinement and ending in recovery. These cases are rarely investigated at the most interesting period and when they are subsequently seen there is probably nothing found to explain what the exact condition was. Possibly detachments of retinæ or suddenly developed œdema of the choroid and retina may explain some of them. The following is a case in point. A woman had to have her first pregnancy terminated between the sixth and seventh month for puerperal eclampsia. After her confinement she was quite blind for four days. She had gorgeous visions of various colours and there was an instantaneous shifting from lightness to darkness; then sight gradually returned. The albuminuria disappeared a few days after the confinement. A year later beyond a little grey haze about both discs and slight tortuosity of the vessels there was nothing abnormal to be seen.

Leeds.

[1] Abstract, Knapp's Archives of Ophthalmology, vol. xx., p. 457.
[2] THE LANCET, Jan. 13th, 1883, p. 47.

ROYAL MINERAL WATER HOSPITAL, BATH.—The annual meeting of the subscribers of this institution was held on May 2nd, under the presidency of Colonel Vaughton-Dynnock. The one hundred and fifty-ninth annual report stated that owing to extensive alterations in the building the greater number of beds had been closed since August last and the number of in-patients had been limited to 50. The financial statement showed that the expenditure had exceeded the income. The report added that an appeal had been made to the public for the necessary funds, which were estimated at £6000, to meet the expense of the necessary alterations, but only £450 had been received in response, so that the committee are compelled to use some of their capital for the purpose. Mr. W. Kemble was elected President.

# IS THE MURMUR OF MITRAL STENOSIS SYSTOLIC OR PRESYSTOLIC IN RHYTHM?

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As a student I was taught, and I believed, that the murmur of mitral stenosis was presystolic in rhythm. I read M. Fauvel's paper on the subject in the *Archives Générales de Médecine*;[1] I applied what I there read to as many cases of mitral stenosis as I had the chance of examining; and I satisfied myself that the thrill and murmur were really presystolic. It was therefore with somewhat of a shock that I read Dr. W. H. Dickinson's paper published in THE LANCET of Oct. 1st, 1887, p. 650, entitled, "Remarks on the Presystolic Murmur, Falsely so called." I read this interesting paper carefully and was almost convinced but not quite.

It is not my intention in this paper to go over the ground again, at least from the same standpoint. It appeared to me that the Roentgen rays might possibly be able to settle the question. I thought what the sense of touch and hearing was unable conclusively to synchronise the addition of that of sight might. Since the installation of the Roentgen-ray apparatus in the City of London Hospital for Diseases of the Chest I have examined, as a matter of routine, all my cases of mitral stenosis with the x rays, and have, I venture to think, learned much thereby as to the rhythm of the thrill and murmur of this variety of valvular disease. It will be well, however, before discussing the question, to describe shortly what is seen of the action of the normal heart on the fluorescent screen. The shadow of the normal heart shows changes of form synchronous with the rhythmical contractions of the organ. The movement of the apex, when this is well seen, is always a heaving movement which carries the apex somewhat rapidly towards the left, followed by a retreat more rapid still towards the middle line. It is not the apex of the cardiac shadow, however, as we should have thought, that presents the greatest displacement, but the middle of the left border corresponding to the ventricular cavity at a point where it crosses the shadow of the fourth left rib. The displacement of the left border of the cardiac shadow manifestly corresponds to the alternate systole and diastole of the organ. If with these movements before our eyes we auscultate the heart by means of a flexible stethoscope we can satisfy ourselves that the first sound of the heart corresponds to the exact moment when the movement of projection of the cardiac shadow towards the left gives place to its immediate retreat towards the middle line. The projection towards the left is therefore clearly presystolic and corresponds to the systole of the auricles, while the movement of retreat corresponds to the systole of the ventricles. After this movement of retreat comes a slow and progressive distension of the shadow of the ventricular wall, only occasionally seen, which corresponds to the period of repose of the organ. Then begins anew the brisk projection of the shadow towards the left during the systole of the auricles. Professor Potain has observed that this projection of the cardiac shadow coincides with the external phenomena of the impulse as perceived by inspection and palpation of the præcordial region. There can be, I think, no question that the visible impulse, distinct from the brisk shock which follows it, is a presystolic phenomenon, due to the systole of the auricles and to the consecutive distension of the ventricles. Radiography demonstrates in some cases beyond question that the position of the shadow which really corresponds to the apex of the heart is obviously below the point of cardiac impulse against the chest wall. The contour of the shadow of the right side of the heart when it projects beyond the sternal and spinal shadow shows movements of the same rhythm as those of the ventricular line. So much for the normal heart as seen beating with the screen.

I will now pass on to the heart of mitral stenosis. In a

[1] Archives Générales de Médicine, 4e série, tome i., p. 1, 1843. The original paper on the subject.

well-marked case of so-called pure mitral stenosis if the hand be placed over the præcordial region at the point of maximum intensity of the thrill (and this can be done without obliterating the shadow of the heart on the screen) and the cardiac shadow be watched, we find that the thrill corresponds to the advance of the left border of the shadow of the heart to the left and ends abruptly with the retreat of the shadow towards the median line—that is to say, the thrill is obviously presystolic in rhythm and ends with the systole. It begins with the advance of the left border of the cardiac shadow to the left—that is, during the auricular systole—and ends with the retreat of the shadow towards the middle line—that is to say, with the ventricular systole. Again, if while watching the heart with the screen the chest-piece of a binaural stethoscope be placed on the screen at the point of maximum intensity of the murmur (previously determined) it will be found that the murmur begins at the moment when the shadow of the left ventricle is advancing to the left—that is, during the auricular systole—and ends abruptly when the shadow retreats towards the middle line—that is, with the ventricular systole. I have examined a good many cases of pure mitral stenosis with reference to this point and have convinced myself that the thrill and murmur are truly presystolic in rhythm.

It is very interesting to go through the correspondence in THE LANCET that followed the publication of Dr. Dickinson's paper. Dr. Graham Steell, in a letter on the subject on Oct. 15th, 1887, p. 784, came very near to a solution of the question. He says: "Dr. Dickinson states that he has found that the presystolic murmur begins with systolic (i.e., ventricular?) movement, but such movement does not necessarily imply contraction. It seems very likely that there will be some movement communicated to the ventricles by the contraction of the auricles." This is exactly what happens.

Harley-street, W.

## OPO-THERAPY IN GYNÆCOLOGY.

BY JOHN PHILLIPS, M.A., M.D. CANTAB., F.R.C.P. LOND.,

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OPO-THERAPY, which seems a preferable word to organo-therapy, was created by Landouzy to designate the science which treats of curative elements found in the "internal secretion" of certain ductless glands. As the latest craze seems to be the treatment by animal extracts it behoves us carefully to consider whether there is any real ground for supposing that such treatment is efficacious, and if so on what lines and in what manner it should be carried out. The three extracts which must be considered would appear to be (1) thyroid extract; (2) ovarian extract; and (3) extract of the mammary gland.

1. In considering the first it need only be said that ample clinical evidence shows that certain nutrition disorders associated with pelvic disturbance are undoubtedly benefited by this treatment; moreover, the dose of the drug is known and its toxic effects are recognised. It is certainly of value in amenorrhœa so often found to accompany extreme obesity and as a complication of myxœdema; according to some authorities it is beneficial in the hæmorrhages of fibroid tumours of the uterus.

2. In considering the treatment by ovarian extract much difficulty must be encountered at the onset as we are dealing with a drug the dosage and the toxic effects of which are so far quite an unknown quantity. Dr. Régis[1] seems to have been one of the earliest authorities to record the use of ovarian juice. He prescribed it in a case of mania following removal of[2] both ovaries and tubes; the result was most successful although many injections were necessary. Leopold Landau[3] gives his support to this mode of treatment, and since then many original articles (with detailed observations) have been written recommending its adoption in increasingly numerous varieties of female disease.

The methods of administration of ovarian extract appear to be three: (1) that followed by Knauer who grafted the fresh gland into the peritoneum or under the skin;[3] (2) Brown-Séquard's method by subcutaneous injections of the organic extracts; and (3) the method recommended by Horwitz and others and now in general use—viz., administering the extract by the mouth or the rectum, either in a natural state, in the form of "ovarine" tabloids, or as a glycerine extract. With the thyroid extract both dose and toxic effects are well known, but so far no satisfactory evidence has been brought forward as to the effects of ovarian extract. Five-grain tabloids have been given as a rule thrice daily, and I have prescribed as many as three tabloids thrice daily without any toxic effects or any amelioration of the symptoms arising. Jayle has observed zona and Schuster general urticaria after prolonged ingestion of ovarian extract. I saw one case of the latter, of which there was no doubt, but I am strongly of opinion that the rash was due not to the drug but to some impurity in the vehicle of administration. I have given ovarian extract in many diseases (often experimentally), but in none have I obtained any definitely satisfactory results, with the exceptions of the natural and the artificially induced menopause. In eight cases of menopause the distressing headaches and flushes were certainly relieved, but whether this was the possible result of suggestion or not I am unable to say; Krusen,[4] after a three and a half years' experience, is of a somewhat similar opinion. He says that in the treatment of amenorrhœa and dysmenorrhœa it is useless and he noticed no appreciable result in its exhibition during the natural menopause. He thinks that the best results in opo-therapy are attained by the use of the thyroid and adrenal glands and that the ovary in function is in no sense analogous to these organs. Julien[5] finds the drug, on the contrary, of great value in post-operative menopausal symptoms, in amenorrhœa, dysmenorrhœa, anæmia, and chlorosis, and osteomalacia. He gives full notes of 41 cases in support of his assertions.

3. The administration of mammary abstract is surrounded by still greater uncertainty. It is best given in the raw state, cow's udder being cut into thin slices and made into a salad. This method has been frequently prescribed and carried out by Freudenberg.[6] No toxic or other effects beyond a suspicion of improvement in lactation during its ingestion have been recorded.

Brook-street, W.

[1] Gazette Médicale de Paris, 1893, No. 41, p. 481.
[2] Verhandlungen der Berliner Medicinische Gesellschaft, 1895-6, Band xxvii, S. 182.
[3] Einige Versuche über Ovarientransplantation bei Kaninchen, Centralblatt für Gynäkologie, 1896, No. 20, S. 524.
[4] International Medical Magazine, November, 1900.
[5] Sur la Valeur de l'Opothérapie Ovarienne, Thesis, Lille, 1899.
[6] Der Frauenarzt, August 17th, 1900, S. 353.

## SOME QUESTIONS WITH REGARD TO ACUTE MIDDLE-EAR INFLAMMATION.

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THE fact that some unsolved problems still remain with regard to acute middle-ear inflammation was very forcibly brought home to me by the following case.

A man, aged 46 years, consulted me on Jan. 12th of this year giving the following history. On Dec. 21st, 1900, he had a nasal and bronchial catarrh; pain in the left ear came on 10 days later, followed by a free discharge of matter. When I examined him the hearing on the right side was fairly good, but a watch normally heard at 30 inches was not perceived by the left ear when pressed against it, and words spoken in an ordinary tone could only be distinguished when uttered quite close to the auricle. On examination after the removal of the discharge a small pouting perforation was seen above the middle of the membrane, which was, as is usual in these cases, red and bulged, while the malleus was invisible. Air passed through the perforation readily, and after the parts had been freed as much as possible from discharge the patient could hear an ordinary voice across my room. Examination of the anterior nares revealed no abnormality, but on posterior rhinoscopy I saw some pus in the right

choana, while about the middle of the septum there was symmetrical thickening—a condition which I meet with so frequently that I do not attach any importance to it. The presence of pus, however, seemed to me to be important and it at once suggested the possibility of an affection of one of the accessory cavities of the nose, although I recognised that it might be due to the remains of a severe pharyngitis. I syringed out the ear with carbolic solution and plugged it with sterilised gauze. On Jan. 14th, 1901, the gauze was dry, but on blowing by Valsalva's method pus came through the perforation which seemed to have contracted. My watch was heard in contact, but a low conversational voice could only be heard quite near the left ear. I passed the Eustachian catheter, not caring to risk the use of Politzer's method for fear of driving pus up the Eustachian tubes. It will be noted that I allowed the patient to perform Valsalva's experiment at the beginning of this visit, but I think that this was a mistake as it might have resulted in infection of the other ear. I noted that the teeth in the upper jaw were bad, and the patient told me that he had long complained of something dropping into the right side of his throat. As a repetition of the plugging would probably have led to closure of the perforation without cessation of exudation I ordered him to syringe the ear with sterilised boric solution and to dry out with sterilised wool. After this I passed the Eustachian catheter once or twice, but no improvement resulted. On the 22nd there was a little tenderness over the tip of the mastoid and the perforation had further contracted. All through the membrane had tended to bulge and under these circumstances I enlarged the opening by free incision, having first applied Bonain's mixture (carbolic acid, menthol, and cocaine). On this visit transillumination showed the right antrum of Highmore to be opaque. There remained, therefore, little doubt that there was empyema of this cavity and that the pus in the right choana proceeded from it by way of an accessory opening. I have frequently met with such cases in which no pus appeared in the middle meatus as seen by anterior rhinoscopy and in which the first indication was afforded, as in this instance, by the results of posterior rhinoscopy.

I need not follow all the tedious details of this case from day to day. Suffice it to say that while the mastoid pain abated and the discharge became more abundant the perforation gradually diminished in size and again tended to present that pouting appearance which is of such unfavourable significance in these cases. Having made sure of the existence of pus in the right antrum of Highmore I proposed to delay having it attended to until the ear healed. The latter, however, not only showed no signs of healing, but looked very much as if its condition would necessitate draining through the mastoid. While quite recognising that possibly the empyema of the antrum was the original source of infection I failed to realise its importance as a factor in keeping up the middle-ear suppuration. It was more because draining the cavity could do no harm, and if, as I expected, a mastoid operation should become necessary I would rather operate without the presence of pus in the maxillary sinus, that I finally, on Feb. 21st, recommended that a dentist should be asked to open the antrum of Highmore and to insert a plug. I may mention that in the first instance I always have my cases treated in this way, as a good dentist is perfectly capable of making a satisfactory opening and is able to introduce a neatly-fitting plug which the patient can readily learn to put in and take out. If subsequently a larger opening followed by curretting, or a counter opening into the nose, becomes necessary I carry out these proceedings myself. In the case of the patient under consideration pus was evacuated, but after a few days the liquid syringed through was found to be clear, showing that probably the antral suppuration will speedily subside. The operation was performed on the 22nd, and on the 24th the hearing began to improve. On the 26th there was practically no discharge. On March 5th he could hear a whisper across my room and the membrane was beginning to resume its normal colour; while on the 11th a low whisper was perceived at 18 feet, and the membrane was proved to have definitely healed.

I have given this case in some detail, not only on account of its interest, but also because its consideration seems eminently adapted for raising several important questions with regard to acute middle-ear inflammation. These I shall treat shortly *seriatim*.

1. *The connexion between acute otitis media and affections of the nose and naso-pharynx.*—It is of course perfectly well known that acute nasal or pharyngeal inflammation may lead to suppuration of the middle ear. It is also known that marked adenoids, and possibly much enlarged inferior turbinals, may predispose to the affection. It is, however, not sufficiently recognised that there is a form of adenoids which practically produces no other trouble but which may be responsible for recurrent attacks. In these cases the patient breathes perfectly; he may be subject to colds in the head but they do not attract much attention. On examining with the rhinoscopic mirror, however, a layer of adenoid tissue is observed occupying the space between the Eustachian orifices and apparently pressing upon their margins. On digital examination the lymphoid tissue will be felt, but it will be observed that there is not any great quantity present. In such cases, however, the recurrent acute ear attacks will usually cease after the adenoid tissue has been removed. The relation between empyema of an accessory cavity and acute middle-ear inflammation has not, I think, been hitherto more than incidentally alluded to. The instance above described shows a very distinct connexion, as it is hardly conceivable that the rapid cure of a case which until the antrum of Highmore had been opened seemed going from bad to worse was merely a coincidence. It is of interest to note that the empyema of the antrum was on the right side, while the ear affection was on the left. It seems obvious that in some way the presence of free pus in the right choana affected the opposite ear, but I do not think that the *modus operandi* will repay speculative discussion.

2. *What is the best method of treating middle-ear inflammation after spontaneous or artificial perforation has occurred?*—I do not think that the new method of plugging the meatus with aseptic dressing after so far as possible sterilising the canal is at all suitable for all cases. In this instance the perforation certainly diminished in the two days during which such dressings were applied and, as it appeared to me, on account of their application. In future I shall adopt this method with great caution, if at all, when the perforation is small and the membrane tends to bulge. It is of course now the custom to decry the use of Politzer's bag and even the catheter in all cases while suppuration is still going on. In the instance just described the former was certainly contra-indicated because of the presence of pus in the right choana and possibly there was some risk in employing even the latter. In the average patient, however, where there is no recognisable infective secretion in the nose or naso-pharynx and where drainage is difficult owing to the small size of the perforation I am still inclined to advocate both methods. If they seem actually beneficial I am not disposed to be deterred from their use because they are hypothetically or even theoretically dangerous.

3. *When should the question of mastoid operation be considered?*—There are two conditions which, after perforation has occurred, seem to me to indicate that the case will be troublesome—to wit, (1) excessive discharge, and (2) a small perforation in a bulged membrane. When the discharge appears in such quantity that it is hardly conceivable that it can be all secreted by the lining membrane of the tympanum it will usually be found that after a varying period some tenderness, or even spontaneous pain, arises in the mastoid region. If then Schwartze's operation be performed it will often be discovered either that the whole process is more or less softened and infiltrated with granulations or that the antrum is large and contains much pus. The former is the more common and in my experience it is a frequent complication in influenzal otitis.

In the presence of a small pouting perforation and a bulged membrane, such as existed in the case recorded, the surgeon is often in great difficulties as to how best to obtain drainage. A free incision is valuable for the moment, but, as every experienced aurist knows, it soon closes and the condition is no better than before. The least indication of mastoid inflammation will give an excuse for operating and I believe that, given the above condition of matters persisting after other remedies have had a fair trial, this excuse should in the interests of the patient be taken immediate advantage of. It is, indeed, an open question whether the occurrence of pain should be awaited.

One word more as to the method of operating in these recent cases. It is of the utmost importance that the middle-ear structures should be respected, and for this reason I again repeat that Schwartze's method should be

adopted, associated, if necessary, with the removal of any softened bone which may be found in the lower part of the process. If these rules be adhered to we commonly find that the discharge from the ear ceases, the membrane heals, and almost perfect hearing results.

Edinburgh.

## A SIMPLE FORM OF ELECTRICAL LIGHT AND HEAT BATH, WITH EIGHT CASES OF OSTEO-ARTHRITIS TREATED BY IT.

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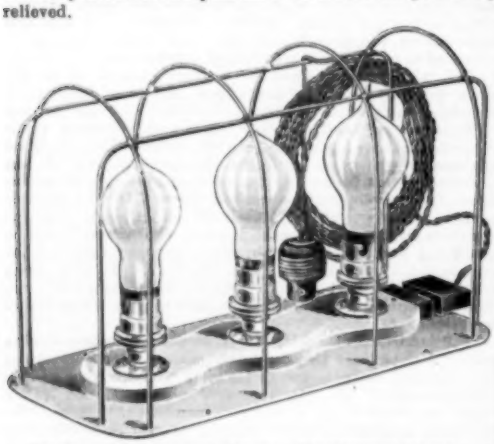
THE apparatus[1] consists of three 32-candle power lamps fixed on an aluminium base and protected by a wire cage from contact with the skin of the patient or with the blankets forming the walls of the chamber. A piece of flexible wire connects the apparatus with the socket of any domestic lamp-holder, the lamp having been first removed. The amount of current consumed by the apparatus is not sufficient to damage the domestic installation or to blow fuses, and costs about twopence per hour. The apparatus may be used to heat up a single limb or the whole body and it has been employed in eight cases of chronic joint disease with the result that mobility has always been markedly increased and pain has been almost always entirely relieved.



The electrothermogen ready for use. The adapter at the end of the coil of flexible wire is merely substituted for an ordinary incandescent electric lamp in the bedroom or ward and the current then switched on.

The limb, the apparatus, and a thermometer are all placed together under a chamber formed of several blankets thrown over a cradle. The limb is covered with a single layer of lint to prevent any risk of scorching a particularly tender skin. This is gradually withdrawn in successive baths. The temperature of the chamber rises in from 15 to 30 minutes to from 200° to 250° F. The limb sweats copiously and a general perspiration is induced. As a rule the body temperature rises two or three degrees, especially when the whole body is treated. Frequently the limb acquires a transient mottled erythema. Even in the most obstinate cases pain practically always subsides by the end of the hour and generally it does not recur for several days. Constitutional treatment should be directed towards supporting the patient's strength during a course of baths, which may be repeated daily or on every second or third day.

It is maintained that practically the same benefit is derived from this small apparatus as from the more elaborate contrivances now in use, but these unfortunately are either very costly or can only be hired at a high rental. The temperature is not so high in the electrothermogen, but it is as much as the patient can endure for one hour.

At the end of a bath a stiff joint is much more supple and less tender, so that an excellent opportunity for massage is afforded. If it is desired to treat the whole body, after the fashion of a hot-air bath, such as is given in cases of renal disease, it is necessary to employ two pieces of apparatus to heat the larger chamber. The wicker chamber of the bath above referred to serves very well, but a very portable framework has also been designed, over which blankets are thrown.

So far the treatment has been applied to eight cases of rheumatoid arthritis—all very severe cases in which pain and deformity were prominent symptoms. The ages ranged between six years and 60 years, and the results as regards pain and stiffness have been very good, but in some of my cases a "sticking point" seems to be reached beyond which improvement does not proceed. They are in no sense selected cases.

CASE 1.—The patient was a man, aged 59 years, with a history of 18 months' illness. Advanced osteo-arthritis was present in all the limbs, with swelling, lipping of the cartilages, contractures, stiffness, and constant dull pain. The patient had several hot-air baths with relief from pain. He had enlargement of the epitrochlear, axillary, and inguinal glands, especially of the former.

CASE 2.—The age of the patient was 21 years. There had been chronic arthritis in many joints for six months. One of the knees was much enlarged and very painful. The thyroid gland had been enlarged for three months. The pain remained unrelieved after undergoing seven well-known methods of treatment extending over three months, but complete relief (persisting until discharge from treatment) was brought about by a few baths.

CASE 3.—The patient was a boy, aged six and a half years. He was a very pale, fragile boy, bearing a most striking resemblance to the picture in Clifford Allbutt's work illustrating rheumatoid arthritis in the child. For one and a half years he had had marked swelling in, and immobility of, almost every joint, associated with anæmia and enlargement of the spleen and of the axillary and inguinal glands. This condition had steadily advanced, leading to wasting of the muscles and contracture of the legs. He was given nine baths of half an hour at 180° F. He seemed to be able to tolerate no higher temperature and he was taken out directly his own temperature reached 100°. There was a decided increase in mobility of the joints, the knee being extensible through 50 additional degrees. But the child seemed to be too fragile for the treatment, so it was discontinued and the ground which had been gained was subsequently more than lost.

CASE 4.—The patient, a man, aged 37 years, gave a history of very severe arthritis affecting every joint, including the spine, the jaw, and the ribs, of 18 months' duration. He had had gonorrhœa two and a half years before any joint trouble appeared. On admission he was anæmic, the muscles were wasted, costal respiration was impossible, and movement of the jaw and neck was very limited. There was also a large amount of albumin in the urine with no sign of nephritis except œdema of the legs. He has now had over 40 baths, of from 170° to 250° F., lasting from one to two hours. The body-temperature rose regularly to from 100° to 102° during the bath, so that his temperature chart resembled that of tertian ague. His general condition improved very much after a few baths which he took with considerable relish. The mobility of the joints also improved a great deal up to a certain pitch and then it ceased. This improvement made him less helpless and more comfortable. He derived benefit also from massage applied after many of the later baths. The albuminuria persisted. Dr. C. R. Box (whom I have to thank for permission to publish those facts which bear on the bath treatment of this case) tells me that there is no further improvement and that he relapses when treatment is discontinued.

CASE 5.—The patient, a female, aged 22 years, had had for six years pain and swelling in all the large joints in turn, but she now complained only of swelling and stiffness and constant pain in the small joints of the hands and in the right shoulder. Her illness had been of several months' duration. She had had for several months excellent out-patient treatment, but without benefit. A few radiant heat baths produced marked improvement in the mobility and

[1] This apparatus can now be obtained of the Boardman Electrical Patents Company, 10, Union-court, Old Broad-street, E.C., price £3. It is supplied to medical men only. It is proposed to call it the "Electrothermogen."

lessened the pain. She has had now six weeks of bath treatment on alternate days (one hour at from 200° to 250° F.) and has had only three attacks of pain. Both epitrochlear glands, however, are still enlarged.

CASE 6.—The patient was a querulous old woman, suffering from advanced rheumatoid arthritis, who after having two baths professed that the pain was much relieved. It had yielded to no other treatment.

CASE 7.—This was a very interesting case of what was to all appearances rheumatoid arthritis in the right hand and shoulder, following three weeks after being run over across the right chest and right forearm. The injury caused unconsciousness (15 minutes), fracture of the second and third costal cartilages, and paræsthesia in the middle and index fingers. It is now four months since the accident and there are marked stiffness and dry swelling and frequent pain in the joints of the right hand and in the right shoulder. There are also coarse creaking in the right shoulder and slight creaking in the knees. The x rays show no bony changes and there is no glandular enlargement. There is no glossy skin or other sign of trophic disturbance, except slight roughening of the upper half of the nails. Muscular wasting is present, with myotatic irritability. If this be a case of osteo-arthritis, as would at once be assumed in the absence of the history of nerve injury, it becomes the strongest piece of evidence which I have read of in favour of the neuropathic origin of osteo-arthritis. Under the radiant heat treatment the pain and mobility rapidly improved, but the "sticking-point" was soon reached and progress is now (after six weeks' treatment) very slow.

CASE 8.—In this case of pain, swelling, and stiffness of the small joints of both hands the patient is still under treatment. 13 baths have banished the severe pain and have vastly improved the mobility and usefulness of the hands. Only the hands and arms were treated, but a profuse general perspiration was always induced. Every other treatment had been tried without success and the Dowsing whole-body bath had proved too exhausting.

So far the treatment by this simple apparatus has only been applied to these eight cases of advanced and painful joint disease and the results show that in such cases it will succeed in relieving pain and stiffness when drugs fail, but that, like all other measures, it can in no sense cure this obstinate complaint. More favourable results would doubtless follow in gonorrhœal arthritis and in sprains where rapid recovery was important. My impression is that the light is beneficial as well as the heat, and one reason for this opinion is the transparency of human flesh and bone to these rays. This can be readily demonstrated by grasping an electric lamp with both hands in a dark room. I fancy, too, that *dry* blankets are helpful in raising the temperature of the chamber, and that they do so by condensing the vapour arising from the perspiration of the patient and thereby liberating the latent heat of this vapour. This effect can be shown experimentally by placing a clinical thermometer in the mouth surrounded by a few layers of dry flannel. The mercury will rise many degrees—e.g., 15°—above the real temperature of the patient, and this device may possibly be known to the professional malingerer.

I have not yet been able to use the apparatus for inducing perspiration in renal cases, but it would doubtless be more efficient, less troublesome, and less dangerous than the ordinary spirit-lamp arrangement, provided that an electrical supply were present in the ward or house. Nurses tell me that it is much less trouble.

The advantages claimed for this little apparatus are:—1. Small initial cost and trivial running cost. 2. Extreme portability and lightness. It is made of aluminium and will stow in a small handbag. 3. No smell. No risk from fire, which cannot be said of the ordinary bath used in cases of renal disease. 4. Temperature of the air raised to from 200° to 250° F.—a good deal higher than in an ordinary bath just referred to. 5. The current can be taken from the domestic electric light by taking out a lamp and replacing it by an adapter in two seconds. The amount of current used will not blow even a weak fuse. 6. Intense light as well as heat is produced, and the former can be proved to penetrate human flesh and bone and is probably of considerable sudorific and therapeutic power. 7. The one apparatus can be used indifferently for any part of the body, it being only necessary to arrange a cradle of suitable size. 8. The patient is treated in his own bedroom or ward without subsequent exposure to risk of chill.

In concluding, I have to thank Dr. Hector Mackenzie very sincerely for suggesting to me the problem of reducing the hot-air bath to its simplest terms, and for his subsequent kindness and help in placing his cases at St. Thomas's Hospital at my disposal. I must also thank Dr. G. F. Elliott, Dr. Frank Nicholson, and Dr. E. O. Daly for allowing me to publish their cases at the Hull Royal Infirmary.

Royal Infirmary, Hull.

# A Mirror of HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

## ST. GEORGE'S HOSPITAL.

### THREE CASES OF FRACTURE-DISLOCATION OF THE SPINE TREATED BY LAMINECTOMY.

(Under the care of Mr. HERBERT W. ALLINGHAM.)

THE operation of laminectomy for fracture-dislocation of the spine must necessarily fail to relieve in a large proportion of cases, for the cord must be pressed on by the displaced bone to an extent sufficient to prevent the passage of nervous impulses, and yet the pressure must not have been sufficient to tear through the cord. Yet laminectomy is always justifiable in fracture-dislocation of the spinal column when paralysis of the body below the lesion is present. It is but rarely necessary to lay open the dura mater in these cases, though it adds but little to the danger of the operation if asepsis is preserved. For the notes of the cases we are indebted to Mr. P. Lockhart Mummery, house surgeon.

CASE 1.—A man, aged about 45 years, fell down an area and was admitted into the Chelsea Infirmary on Dec. 24th, 1900. He was quite conscious on admission and on examination it was found that he was completely paralysed below the shoulder girdle and that there was complete anæsthesia below that point; he could move his arms but could not extend his wrist or fingers; breathing was entirely diaphragmatic. The knee-jerks were absent; the plantar reflexes were present. No deformity of the cervical spine could be felt, but a good deal of bruising subsequently developed at the base of the neck behind.

On Jan. 9th, 1901, he was transferred to St. George's Hospital. As he was evidently suffering from injury to the spinal cord at a level somewhere between the fifth and sixth cervical vertebræ and as no improvement in his symptoms had occurred since the accident Mr. Allingham decided to perform laminectomy.

The operation was done on Jan. 11th. The patient was placed on his face on the operating-table with his head over the end and supported by an assistant; chloroform was administered. Mr. Allingham made a median incision and cut away the fourth, fifth, sixth, and seventh cervical spines (the operation was rendered difficult by the fatness of the patient's neck and the consequent depth of the wound). He then cut through the laminæ with Hoffman's bone forceps and exposed the dura mater. The fifth vertebra was found to be dislocated forwards and its laminæ were pressing on the cord posteriorly; the laminæ were therefore cut away and the cord was freed. The dura mater was then opened; the cord itself looked normal. A large drainage-tube was inserted and the wound was sewn up. The patient was then placed on a water-bed and his head and neck were steadied with sand-bags. 24 hours after the operation his abdomen became much distended and his breathing embarrassed from the pressure on his diaphragm. He also vomited several times. A long rectal tube was passed and a large amount of flatus was expressed from the abdomen through it by manual pressure, the abdomen being compressed only during expiration so as not to interfere with respiration. In this way the distension was rapidly relieved and after an injection of morphia he went to sleep for several hours and

was much better next morning. On Jan. 15th the paralysis of the arms had partly improved and sensation had returned above the umbilicus; there was also some sensation over the front of both thighs. The wound was dressed and the tube was removed. A good deal of cerebro-spinal fluid had escaped. On the 17th his temperature at night rose to 103° F. and there was evidence of cystitis; his bladder was accordingly washed out twice daily and salol was administered by the mouth. On the 18th his breathing was difficult and there were signs of bronchitis in both lungs. He was accordingly turned over on to his left side and subsequently was always kept in that position, so as to leave his right lung free from secretion if possible, as he could not cough up his secretion at all. His temperature rose to 102° and varied between that and 103° till the 20th, when it dropped to normal. On the 20th diarrhœa set in which proved to be intractable. All beef-tea and fluid-diet were stopped and fluids were reduced to a minimum; astringents and opium, &c., were administered and everything that could be thought of was tried, but the diarrhœa continued and after lasting for some time proved fatal on Jan. 26th. On the 22nd he was able to move his legs very slightly and complained of twinges of pain in them. There was further slight improvement in the paralysis till death.

*Necropsy.*—At the post-mortem examination the cord was found to be normal except for some slight softening at the level of the injury. The intestines appeared to be quite normal and no ulceration or other lesion could be found to account for the diarrhœa. On examining the bladder there was evidence of some old cystitis chiefly confined to the neighbourhood of the trigone and a large abscess containing pus was found in his prostate. This abscess did not communicate with either the bladder or the rectum, though both were very carefully examined for such a communication. His other organs were normal except for some congestion of the lungs.

CASE 2.—A man, aged 30 years, was crushed in a lift accident on April 18th. On admission into St. George's Hospital there was marked irregularity of the eleventh dorsal spine with absolute paralysis and loss of sensation below that level. On the 19th, 24 hours after the accident, sensation had returned except in the soles of the feet. On the 20th, as no improvement had taken place in the paralysis, it was thought advisable not to wait any longer. Mr. Allingham performed laminectomy, gas and ether being administered. He made a median incision and removed the spines of the tenth, eleventh, and twelfth dorsal vertebræ and cut through the laminæ. On exposing the dura mater it was found to be torn and there was a large clot beneath it pressing upon the cord; this was removed, a drainage-tube was inserted, and the wound was sewn up. The patient rallied well from the operation. On the 22nd the drainage-tube was removed and the wound was found to be healing. Gradual improvement took place and the wound healed rapidly. On June 8th he had regained complete control over his sphincters, which had been previously absent, and could move his legs slightly. On the 27th all the paralysis had disappeared and he could walk with assistance, and on August 8th he was discharged from the hospital quite convalescent and shortly afterwards was able to resume his duties.

CASE 3.—A man, aged 56 years, was admitted into St. George's Hospital, having fallen down a flight of stairs. On admission there was complete paralysis of the lower limbs, abdomen, and thorax, respiration being carried on by the diaphragm alone; both hands and forearms were paralysed; the deltoids, however, were not paralysed. There was complete loss of sensation below the second rib. Priapism was present and there were no knee-jerks; the plantar reflex was well marked. No deformity of the spine could be felt. A diagnosis was made of fracture of the cervical vertebræ and pressure on the cord at about the level of the sixth cervical vertebra, and immediate laminectomy was decided on.

Anæsthesia was commenced with gas and ether and continued with chloroform, the patient being placed face down on the table. Mr. Allingham made a median incision from the fifth cervical to the second thoracic spine; the fifth cervical vertebra was found to be dislocated and pressing on the cord; the laminæ and spines of this and the sixth cervical vertebra were cut away and the dura mater was opened; the cord itself was much injected. The wound was closed and a drain was put in. The body temperature previously to operation was 101·5° F. About five hours afterwards it had risen to 108°. Cold sponging was tried with a view to diminish it but without effect, and in about an hour the man died, the temperature rising after death to 110°.

*Necropsy.*—At the post-mortem examination the second rib on the left side was found to be fractured as were the fifth and sixth cervical vertebræ. The cord in this region was quite free from pressure but was much softened. There were well-marked atheroma of the blood-vessels and a rather flabby heart. The lungs were much engorged with blood.

*Remarks by* Mr. MUMMERY.—In Case 1 the patient was a very stout and alcoholic individual and consequently was not at all a good subject to recover from such a serious injury. In spite of this, however, he lived for 33 days and at the time of his death, although only 15 days after the operation, there were already marked signs of improvement in the paralysis and anæsthesia. The diarrhœa, which undoubtedly was the cause of his death, appears to have been due to some atonic condition of the intestines, as no lesion could be found to account for it. Whether the abscess in his prostate was secondary to the cystitis or *vice versâ* there was nothing to show; it did not, however, appear to have resulted from the careless use of a catheter. The case is of some interest as it shows that the spinal cord is capable of recovering, to some extent at any rate, after having been subjected to pressure for a considerable time, in this case for over a fortnight.

Case 2 is chiefly of interest in showing what a long period of time is often necessary for the complete recovery of a damaged cord. The operation was performed on April 20th and recovery was not complete until June 27th.

Case 3 is a curious one, as the temperature rose to such a remarkable height and very well marked local softening of the cord was present though the patient only lived a few hours after the accident. The operation did not appear to hasten death in any way, as the temperature had commenced to rise already, and rose steadily until at 108° it proved fatal. It seems possible that the high temperature and softening were the result of a very acute myelitis.

These cases show the value of early operation in all cases of fracture-dislocation of the spine where there are symptoms of cord lesion. The operation itself is not a dangerous one and the patients seem to get over it very well. In the majority of the cases some lesion which can readily be dealt with is found, and the cord is able to be relieved of pressure by simply removing the laminæ of the affected vertebræ and those of the vertebræ above and below. A large incision greatly facilitates the operation. Laminectomy stands in the same relation to compression of the spinal cord as trephining does to compression of the brain, and the teaching of modern surgery is to trephine all cases of compression of the brain as soon as it can be localised. The same law seems to apply to compression of the spinal cord, and in the latter case there is the additional advantage that the localisation is generally quite easy. Even if nothing is found on exploring the dura mater little harm has been done and more patients will be saved by early operation than by leaving them alone. With regard to anæsthetics, there does not seem to be any serious contra-indication to chloroform, patients usually taking it well; ether is contra-indicated, as it is liable to cause some congestion of the bronchi, and the patient in a case of cervical injury is unable to cough up any secretions that may collect in his lungs.

## CREWKERNE HOSPITAL.

### A CASE OF COMPOUND FRACTURE OF THE PATELLA AND TRAUMATIC DISLOCATION OF THE KNEE.

(Under the care of Dr. J. H. LAMB.)

COMPOUND fractures and wounds of joints demonstrate as clearly as any other department of surgery the great benefit of antiseptic treatment. At one time a wound of the knee such as occurred in the following case would certainly have been followed by prolonged suppuration with destruction of the joint, even if pyæmia or septicæmia had not occurred, while with antiseptic treatment a moveable joint was obtained. The circumferential wiring of a fractured patella is certainly the simplest method and gives excellent results.

A man, aged 60 years, was admitted to the Crewkerne Hospital on June 22nd, 1900. The same afternoon, whilst at work with a scythe, he slipped and fell on it. When first seen the wound was wrapped up in old dirty cloths, and on

these being removed the cut edges of the patella could be distinctly seen. Ether was administered and the wound was thoroughly examined. The scythe had cut the patella in two and opened into the synovial sac of the joint; the internal lateral ligament was divided for about half of its extent and the external lateral ligament was completely severed, so that only a small part of the internal ligament and the posterior ligament was left uninjured. The whole wound was filled with blood-clot. This was washed out with corrosive sublimate (1 in 2000) and the articular surfaces of the joint were found to be uninjured. The synovial membrane were first stitched and the joint was again well washed out with the lotion. The lateral ligaments were next sutured with a fine cat-gut suture and the rest of the wound was again douched with the lotion. No bone drills being obtainable the divided edges of the patella were drawn together by wire stitches passed from below upwards through the ligamentum patellæ and the tendon of the quadriceps extensor, so that the wire passed completely round the patella. The wound was again washed and the skin and superficial fascia were drawn together by silkworm-gut. A dry boric dressing was applied. By the next day the dressings were soaked through by a bloody discharge. The temperature was 100° F. but the pulse was only 76, and as the dressings had dried the wound was left alone. Up to July 1st the temperature ranged from 99° to 101·4° (on June 25th), but as there was no corresponding increase in the pulse-rate the wound was left alone till July 3rd, when it was dressed and found to have healed by first intention. The stitches were removed and a dry boric dressing was applied. The patella was in good position and no movement at the cut surface could be obtained. On the 4th the wound was again dressed, the leg was put up in plaster-of-Paris, and the patient was discharged from the hospital. In three weeks he was re-admitted to the hospital, when the plaster was removed and the wire stitches were taken out. There was a slight amount of movement of the joint. By the end of August he could walk very well with a flexible knee-joint. On Sept. 16th he returned to work with a good moveable knee-joint.

# Medical Societies.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

*Intestinal Intoxication due to Appendicitis.—Pharyngeal Pouch of Large Size Removed by Operation.*

A MEETING of this society was held on May 14th, Dr. F. W. PAVY, the President, being in the chair.

Dr. SIDNEY MARTIN communicated a paper on a case of Intestinal Intoxication due to Appendicitis. The patient, a man, aged 50 years, under the care of Dr. C. D. B. Hale, was brought to Dr. Martin with symptoms pointing to intestinal intoxication. In the summer of 1899, on the voyage home from Norway, he was sea-sick and he suffered somewhat from looseness of the bowels. There was no indigestion, but there was gradual loss of appetite. The motions, although not very frequent, were never solid, and they became more and more offensive. There was never any slime or blood with the motions. Eight weeks after the illness commenced the most marked symptoms were pallor with cachexia, great emaciation, and flabby muscles. There were no signs of organic disease in any part of the body. The temperature was irregular. The intestinal evacuations were not very numerous, from one to three daily, but they were always liquid and extremely offensive. Several large lumps proved to be pieces of apricot which, on inquiry, were found to have been eaten eight weeks previously. Repeated examination failed to discover any cause of the intestinal decomposition. The treatment adopted at this stage was flushing the colon with solutions of boric acid. The wasting continued, the patient losing 11 pounds in 15 days, so that his condition had rapidly become desperate. He was now extremely weak and greatly emaciated. The deep inguinal glands of the right side were enlarged. At one examination of the abdomen a mass was felt in the right loin and it was decided to explore the abdomen. At the operation (December, 1899) it was found that the mass felt in the right loin was the kidney, which had become readily palpable owing to the great emaciation. The cæcum was thickened and the appendix was enlarged, both being elongated and thickened, while there were some calcareous glands between the ileum and the cæcum. The appendix, the two calcareous glands, and one other enlarged gland were removed. An examination of the appendix showed enormous thickening of the coats. The contents were extremely fœtid, like the motions, and consisted of one or two fæcal concretions, as well as much liquid matter. Two small erosions were seen in the mucous membrane. The diseased appendix was considered as the origin of the patient's condition. After the operation the patient was in an extremely weakened condition and there were occasional slight rises of temperature due to suppuration round the stitches of the wound. Recovery, however, although gradual, ultimately became certain. In June, 1900, a small quantity of albumin was discovered in the urine with some casts, the specific gravity being 1017. At the end of July, the bowels were only occasionally loose and possessed no fœtor. The renal signs gradually disappeared, and 10 months after the operation the patient was completely restored to health. Commenting on the case, Dr. Martin remarked that disease of the appendix causing acute or subacute disease was usually associated with definite physical signs, but in the case which he had recorded there was severe illness due to chronic disease of the appendix in which the main symptom was the decomposition of the intestinal contents causing a profound general intoxication. In adults prolonged intestinal decomposition was usually associated with obstruction in one or other part of the colon or with chronic dysentery, and in this case these were regarded before the operation as the most likely causes, but the history of these was wanting in the case. The long retention (two months) in the intestinal tract of comparatively large pieces of apricot in a case in which there was continuous looseness of the bowels was an unusual circumstance worthy of note. The superficial lymphatic glands in the inguinal region and other parts were easily felt and on the right side, near Poupart's ligament, one deep inguinal gland more particularly was distinctly enlarged. This enlargement rapidly disappeared after the operation and it might probably be considered as part of the intoxication process. There was in this case no bacterial infection as far as could be discovered; the walls of the thickened appendix showed no bacteria and there were none in the microscopic sections of the lymphatic gland which was removed from the abdomen.—Mr. RICKMAN J. GODLEE, referring to the surgical aspect of the case, remarked that the abdominal pain was referred to a point distant from the real position of the appendix. Enlargement of the inguinal glands in association with appendicitis, such as occurred here, was a new fact in his experience.—Mr. CHARTERS SYMONDS questioned whether the interpretation put upon the case by Dr. Martin was the correct one. Would not the facts be more correctly explained on the supposition that the patient was suffering from ulcerative colitis in which the appendix participated? The operation did not seem indispensable to the recovery which was perhaps the natural course of the disease. The four symptoms—looseness of the bowels, odour of the fæces, irregular temperature, and profound emaciation—formed a clinical picture of ulcerative colitis, and he was reminded of a patient suffering from that disease who had recovered from five successive attacks, in each of which he had presented all these four symptoms. On the other hand, it was doubtful if any form of appendicitis gave rise to a set of symptoms like those in Dr. Martin's case. Acute appendicitis might give rise to an acute generalised sepsis, and he referred to a case in illustration. Moreover, it appeared to him doubtful if an appendix which had free communication with the cæcum could in any circumstances produce a series of symptoms such as those which had been described.—Mr. JOHN H. MORGAN had known the patient in early life; he had been a great athlete, and had certainly not had tuberculous or other disease in youth. He was staying with Mr. Morgan shortly before his illness and had had no looseness of the bowels prior to Nov. 7th, 1899. The question as to what was the cause of the enlargement of the glands was an interesting one. Probably this was due to the collection of decomposing matter in the appendix, which at the same time caused the general infection. There were several very unusual features about the case.—

Dr. C. D. B. HALE remarked that the condition of the appendix was so extremely fœtid that it had to be immediately removed from the room.—Dr. MARTIN, in reply, remarked that if Mr. Symonds had seen the patient before and after the operation he would have had no doubt about causal relationship of the latter with the recovery. There was not quite a free communication between the appendix and the cæcum. He regarded the appendix as a sort of test-tube which inoculated the rest of the large intestine. The smell was quite peculiar and it was identical in the contents of the appendix and in those of the cæcum. This case was not like any case of ulcerative colitis which he (Dr. Martin) had ever seen.

Mr. RICKMAN J. GODLEE and Mr. T. R. H. BUCKNALL communicated a paper entitled "A Pharyngeal Pouch of Large Size Removed by Operation" which is published *in extenso* at p. 1367 of our present issue.—Sir FELIX SEMON complimented the authors and remarked that perhaps the most important part of the paper was that referring to the unity of the several cystic and other malformations in the front of the neck, a fact which was first recognised by Kostanecki in 1890. He had met with two cases of this kind. One was that of a young man who came to him with a swelling at the side of the neck between the hyoid bone and the lower border of the cricoid cartilage, an egg-shaped moveable tumour which gave distinct fluctuation and which he regarded therefore as an ordinary cyst. He evacuated some material resembling ordinary pus, but the cyst filled again in a week. Again it was incised, caseous débris being evacuated, and again it refilled. Every conceivable method of treatment was tried, but the sinus never healed satisfactorily. The other case was that of an uncomplicated fistula with slight mucous discharge at the side of the neck which ended blindly close to the tonsil. Taught by past experience he took steps for the dissection and removal of the entire tract and the patient recovered. These cases should never be probed or interfered with unless they were prepared to deal thoroughly with the case in order to extirpate the disease.—Mr. ARTHUR BARKER referred to a case which had many features in common with that related by Mr. Godlee, but it was on the other side of the neck. It differed, however. He regarded it at first as a dermoid cyst, because, in the first place, the right auricle was badly developed, and, secondly, there was a tuft of hair in a depression below the neck, and the tumour varied in size from time to time. Thirdly, it had a soft, doughy feeling. The patient felt very ill at the time, possibly indicating auto-infection. This tumour he (Mr. Barker) removed. In front of the tumour was the sterno-mastoid and behind it were the carotid vessels, to which it was adherent by inflammatory adhesions. The tumour could be traced upwards to close beneath the tonsil from near the episternal notch below. There was no doubt a narrow opening into the pharynx. The chief point of interest was the diagnosis of this case from a dermoid cyst. After removal the patient's general health greatly improved.—Mr. GODLEE, in reply, expressed surprise that Sir Felix Semon had not met with more of these cases, because he (Mr. Godlee) regarded them as fairly common in surgical practice. He had seen a good many of these fistulæ which opened mostly at the top of the sternum beside the sterno-mastoid. In the case under discussion he began the operation under the idea that it was of œsophageal origin, partly because of the history of injury.

## MEDICAL SOCIETY OF LONDON.

A MEETING of this society was held on May 13th, Mr. JOHN H. MORGAN, the President, being in the chair. The proceedings will be reported at length next week.

The annual general meeting of the society was held before the ordinary meeting, and as the result of the ballot the following gentlemen, as nominated by the council, were elected to serve in the respective offices during the ensuing year:—President: Dr. William Allchin. Vice-Presidents: Dr. Isambard Owen, Sir W. Mitchell Banks, Dr. Thomas T. Whipham, and Mr. Charles A. Ballance. Treasurer: Mr. David H. Goodsall. Librarian: Dr. Sidney Martin. Honorary secretaries: Dr. Arthur F. Voelcker and Mr. Jonathan Hutchinson, jun. Honorary secretary for foreign correspondence: Dr. William Ewart. Council: Mr. Howard Barrett, Mr. J. Bland-Sutton, Dr. Henry A. Caley, Dr. James Calvert, Dr. J. Walter Carr, Dr. William R. Dakin, Mr. Frederic Durham, Dr. Robert A. Gibbons, Dr. Wilfred J. Hadley, Mr. Walter H. Jessop, Mr. John H. Morgan, Mr. C. W. Mansell Moullin, Dr. Frederick S. Palmer, Dr. Sidney P. Phillips, Dr. H. Campbell Pope, Mr. George R. Turner, Mr. Frederick C. Wallis, Mr. Herbert F. Waterhouse, Dr. Samuel West, and Mr. Edwin F. White.

## CLINICAL SOCIETY OF LONDON.

*Cancer of the Stomach with Unusual Vascular and Blood Conditions.—Perforating Gastric Ulcer causing Subdiaphragmatic Abscess bursting into the Lung.—Cases illustrating the Value of Laparotomy in Ascites.*

A MEETING of this society was held on May 10th, Sir R. DOUGLAS POWELL, Bart., the President, being in the chair.

Dr. W. PASTEUR and Dr. C. PRICE-JONES communicated a paper on a case of Cancer of the Stomach with Unusual Vascular and Blood Conditions. The patient, a metal chaser, aged 61 years, had suffered from gastric trouble for five years. On admission he was very weak and profoundly anæmic and was much emaciated. A tumour was felt near the umbilicus which moved with respiration. The symptoms pointed to cancer of the stomach. On the sixth day after admission the nose became dusky and two days later had acquired a deep purple colour with sharply defined margin which persisted till death. At the same time the toes of both feet became blue-black in colour and insensitive. No pulsation was perceptible in the posterior tibial and dorsal arteries. A few small bullæ containing clear sterile fluid formed on the toes of the right foot. An examination of the blood made on the same day showed red cells, 1,460,000, and white cells, 24,000. Analysis of the white cells gave: hyaline mononuclear cells, 44·59 per cent.; granular polynuclear cells, 54·35 per cent.; granular mononuclear cells, 1·02 per cent.; and numerous normoblasts, megaloblasts, megalocytes, microcytes, and poikilocytes. Death took place 12 days after admission. The necropsy revealed a cancerous growth infiltrating the wall of the stomach near the lesser curvature and invading the adjacent structures. The right posterior tibial artery was patent and appeared healthy. The capillary stasis in the nose and feet was indistinguishable from the condition often met with in Raynaud's disease. The state of the blood, though resembling that of pernicious anæmia in several respects, differed from it in others, notably in the increased number of white cells and the preponderance of normoblasts over megaloblasts. Various observers had recorded states of the blood somewhat resembling that of pernicious anæmia in cases of malignant disease, but the results so far had not established the existence of any special diagnostic characters.—The PRESIDENT remarked that the case was one of considerable interest as throwing some light on those cases, which were not uncommon, which were supposed to be pernicious anæmia but which turned out to be cancer and very often cancer of the stomach. He asked if the ears were involved in the capillary stasis.—Dr. WILLIAM HUNTER wished to remark on the importance of the distinctions between cancer and pernicious anæmia. He thought that the confusion of these two diseases was largely artificial. The resemblances between these diseases, the sallowness and pallor, were superficial, but the blood changes were absolutely distinctive. Moreover, post mortem, pernicious anæmia was readily identified by the excess of iron in the liver. This did not occur in cancer. In Dr. Pasteur's case the amount of anæmia was exceptional and the leucocytosis only reached 28 per cent. In cancer the leucocytes often reached 70 or 80 per cent. In pernicious anæmia it was quite unusual to find any excess of white corpuscles. He regarded the case before the society as quite exceptional. The association of these blood changes (which did not correspond with those of pernicious anæmia) with gastric cancer was, he believed, accidental.—Dr. BATTY SHAW asked if there was any excess of urobilin in the urine. He referred to a case under his care of secondary anæmia which had lately developed numbness and tingling of both hands and signs of Raynaud's disease. He asked if the knee-jerks were altered.—Dr. PASTEUR, in reply, regretted that the case was unavoidably imperfect in many respects. The ears and the hands were not involved in the capillary stasis. There were no obvious changes in the urine. The knee-jerks were, he believed, normal.

Dr. NORMAN DALTON read a paper on a case of Perforating Gastric Ulcer causing a Subdiaphragmatic Abscess

which burst through the diaphragm into the lung. The patient was a woman, aged 25 years, who was admitted into King's College Hospital on Feb. 20th, 1901. Her illness began on Feb. 12th with an aching pain below the cardiac area. On the 14th there was retching but no "vomiting" and no hæmatemesis. There was no pain on taking food. There was slight improvement for a day or two, but then the pain in the left side returned with great severity and was accompanied by great dyspnœa. On admission the temperature was 102·6° and all the signs of fluid at the left base were present. In particular the heart was displaced to the right. It was most noteworthy that although the dyspnœa was very severe the patient lay on the right side. 15 ounces of "clear" fluid were at once drawn from the left pleura. After this tapping tubular breathing was heard at the left base where previously no breath sounds had been audible. There was some relief after the tapping, but on the 22nd there was a severe rigor, and from that day until her death, on March 2nd, there were high remittent fever with several rigors and all the appearances of pyæmia. The physical signs, however, showed that there was no return of the fluid, because (1) the heart was now drawn over to the left side, and (2) a large area between the left nipple and the margin of the ribs as far back as the axilla gave, on percussion, a tympanitic note like that of the stomach. There were no breath sounds over the tympanitic area. It was thought that the lung had been unable to expand and consequently that the heart had come over to the left and the diaphragm and stomach had ascended. As a matter of fact, the tympanitic area was the cavity between the stomach and the diaphragm, which was due to the perforation of the gastric ulcer and the contents of which pushed up the heart and compressed the lung. While she was in the hospital there was no symptom whatever to draw attention to the stomach. Nourishment was taken freely and did not excite pain. Neither was there any cough or expectoration until the morning of March 2nd. The first sputum had a smell, remarkably like lactic acid. Later, however, it became gangrenous in odour and death occurred that night. At the necropsy an ulcer of about the size and shape of an almond was found in the anterior wall of the stomach close to the lesser curvature and about two inches from the cardia. It had perforated, but the hole was now closed by the under surface of the liver. From this point, however, a short sinus between the liver and the stomach passed upwards and to the left and opened into a large cavity between the left half of the diaphragm, the liver, the stomach, and the spleen. The cavity was full of decomposing materials but was quite shut off by good adhesions from the general peritoneal cavity and there was no general peritonitis. Above this cavity there was a hole in the diaphragm which led into a large cavity in the lower lobe of the left lung, which was also filled with decomposing materials. The pleura was quite obliterated around the hole in the diaphragm, which would account for the fluid which was drawn off not being purulent. The lower part of the left pleura (from which the fluid had been withdrawn) was also now obliterated by adhesions. On reviewing the symptoms after the post-mortem examination it was evident that the case followed fairly well the usual course of events which occurred in cases of subphrenic abscess, and Dr. Dalton could only hope that this full report might be of use to others. He would emphasise the following points which have been mentioned by writers on this affection—viz., that these cases might occur without any symptoms to draw the attention to the stomach; that the fluid in the pleura, although close to a foul abscess, might be quite clear; and that the lung symptoms might obscure the real condition. He would also draw attention to the great pain in this case, especially when the affected side was pressed against. The absence of cough could not help the diagnosis, because pleurisy was really present and should have excited its own peculiar cough. The absence of sputum was not remarkable because there was no cough, but it was of extreme importance to note that the first sputum obtained smelt of sour milk, but that this smell was rapidly succeeded by an odour which was wholly gangrenous. As regards mistaking the tympanitic area for the percussion note produced by a stomach which was drawn upwards by non-expansion of the lung, he would plead that the left border of this tympanitic area was curved in a way that suggested the greater curvature of the stomach and that the heart was displaced to the left as well as upwards.—Dr. LEE DICKINSON regarded such cases of subdiaphragmatic abscess bursting into the lung as extremely rare. From the point of view of diagnosis this case was one of great interest.—Mr. LEONARD BIDWELL referred to a case which he had seen, of a man, aged 33 years, without any stomach symptoms. The case was regarded as one of empyema which had burst into the lung and he resected two ribs and opened an abscess in the lung. Shortly afterwards the patient ate some figs and the seeds were found in the dressings. Methylene blue was administered and this also was found in the dressings. Another rib was resected and the patient ultimately made a good recovery. Another case of subdiaphragmatic abscess under his care was that of a woman, aged 66 years. She had presented stomach symptoms, but her case was also diagnosed as one of empyema by means of the hypodermic needle. Several ribs were resected and offensive pus was evacuated, but she did not get well—every time she took solid food the temperature went up. An exploratory operation was performed and an opening through the diaphragm was discovered. Free drainage was established and a good recovery resulted.—Dr. FRANCIS HAWKINS (Reading) referred to the case of a woman, aged 27 years, who was admitted in an emaciated condition into the Royal Berkshire Hospital as a case of empyema in December, 1895. Four months previously she had been under treatment for gastric symptoms and 14 days previously had complained of pain in the side. 20 ounces of almost clear fluid were drawn off from the left pleura, but the patient did not improve. Ultimately there were physical signs which with the history suggested the possibility of a subphrenic abscess, but before any action could be taken the patient became suddenly worse and died. The necropsy revealed a subphrenic abscess containing about six ounces of pus between the left lobe of the liver, stomach, and spleen. On the posterior wall of the stomach was an ulcer which had perforated. The base of the left lung was adherent to the diaphragm and contained a small abscess communicating with that below the diaphragm. Dr. Hawkins also referred to another case of subphrenic abscess which perforated into the pericardium. He agreed with a former speaker as to the latency of symptoms in some cases of gastric ulcer, mentioning two such instances in which perforation ultimately occurred. Both cases were operated on and recovered.—Dr. PASTEUR asked how Dr. Dalton explained the very quick change in the position of the apex-beat. It was too rapid to be due to adhesions. In his experience a tympanitic area over a previously dull area in any part of the chest was extremely suggestive of trouble from below.—Dr. C. R. BOX asked whether the ulcer was still active in Dr. Dalton's case or was the abscess due to the giving way of adhesions? What was the relation of the secondary ulcers to the first? were they of an infective nature?—Dr. DALTON replied that the ulcer was clearly an old one and surrounded by adhesions to the liver. After the perforation the stomach was shut off from the pleura by adhesions. He had thought that multiple ulcers indicated multiple embolism, not infection.

Mr. LEONARD BIDWELL read a paper on Some Cases illustrating the Value of Laparotomy in Ascites. He referred to three cases, in the first one of which the ascites had been due to cirrhosis of the liver; the liver and the omentum were stitched to the abdominal parietes after evacuating the fluid. The patient recovered and had no return of ascites; she remained well for nearly six months when she died suddenly from hæmatemesis brought on by alcoholic excess. In the second case, that of a child, aged nine years, the ascites had been preceded and it was accompanied by albuminuria and abdominal pain. There was also general anasarca. The lad had been tapped 10 times and the fluid reappeared very rapidly. He was now quite well but for a trace of albumin and had had no further ascites. In the third case, that also of a child, aged nine years, the ascites was due to cardiac disease and there was also general anasarca, the liver being greatly enlarged. In this case, too, there was no fresh development of ascites and the child was able to get about, but died from syncope shortly after returning home. The technique of the operation was described, and Mr. Bidwell expressed himself as rather opposed to the employment of drainage in the operation, since this made it very difficult to prevent septic peritonitis, a complication which in a patient with cirrhosis was almost certainly fatal. Several cases had been lost in this way, and he himself lost his first case about four years ago in a similar way. He referred to a series of cases of operation recently collected by Pachard and Lelanto. They had tabulated 22 cases, of

which five died within 14 days and nine were cured; adding two more recent cases and his own five cases, the total of 29 recorded cases was attained; of these, eight died within 14 days of the operation, five other cases died within nine months, five did not improve, two improved, and 10 were cured. He thought that some selection should be made of the cases, the most suitable being those in which the liver was still enlarged. A small contracted liver was, in his opinion, a contra-indication to operation. He did not think that renal or cardiac disease was any contra-indication to operation.—The PRESIDENT suggested that it would be useful to classify these cases according as they were cardiac, hepatic, or, as in some of the author's successful cases, of a complicated nature. He congratulated Mr. Bidwell on his excellent results.—Dr. ALEXANDER MORISON remarked that it was possible to avoid laparotomy in a large proportion of these cases by adopting other procedures. His subsequent experience had confirmed his previous observations. In cardiac cases it was a question whether obliteration of the peritoneal cavity was an unmixed advantage. He referred to a case of cirrhotic ascites in a man who was ultimately cured by having the abdomen firmly strapped by a many-tailed bandage. A cardiac case treated similarly had also been cured. One of the most remarkable of his cases was that of a man who presented a cachexia suggestive of malignant disease who had made a complete recovery under the strapping method. Encouraged by these results he had recently applied the same treatment to cases of tuberculous peritonitis with promising results. The peritoneum might be regarded as part of the lymphatic system, and strapping expressed the fluid from the peritoneum into its proper channels. The principle of aspiration within the thorax was also brought into operation. Tapping and strapping were, he thought, much preferable to laparotomy and scrubbing the peritoneum.—Dr. JOHN FAWCETT related an unsuccessful case of laparotomy for ascites. The patient was admitted to hospital in January last with some fluid in the abdomen which was attributed to cirrhosis. After trying medicinal treatment he asked Mr. A. D. Fripp to perform laparotomy, with scraping and suture of the liver to the abdominal wall, and the patient died five days later. Previously he had been in favour of this treatment, but in future he would hesitate to recommend it.—Dr. DALTON referred to a case brought forward by him earlier in the session. He thought that the operation was practically unattended with risk, but there might be risks afterwards. There must be, for instance, a tendency to hæmatemesis after obliteration of the peritoneal cavity, or, as was suggested by Dr. H. D. Rolleston, there was a risk of poisoning by admixture of the portal blood with the general circulation. Neither of these risks presented themselves in his case, but the third, hernia of the abdominal wound, had proved fatal five years after the operation.—Mr. BIDWELL, in reply, protested that undue weight was attached to the sequel in condemning laparotomy. If a patient died within a month of laparotomy it was set down to the operation, while if the patient died within a month after tapping it was attributed to the disease. He pointed out, too, that some adhesion took place after tapping, and after repeated tapping no doubt a certain number of adhesions were set up, thus assisting in bringing about a cure in the same way as laparotomy.

## BRITISH GYNÆCOLOGICAL SOCIETY.

*Adjourned Discussion on the Clinical and Pathological Consequences of Retroversion of the Uterus, their Preventive, Palliative, and Radical Treatment.—Posterior Vaginal Celiotomy in Operations for Pelvic Disease.*

A MEETING of this society was held on May 9th, Dr. J. A. MANSELL MOULLIN, the President, being in the chair.

Dr. HEYWOOD SMITH in continuing the discussion on Dr. H. Macnaughton-Jones's paper on the Clinical and Pathological Consequences of Retroversion of the Uterus, their Preventive, Palliative, and Radical Treatment, said that he thought that metritis and parametritis were more frequently the effect than the cause of misplacement. It was curious that five out of seven speakers had advocated the use of the stem. The dangers of the sound were sometimes exaggerated. Where there were no adhesions it might be used to replace the uterus, provided it were passed with gentleness, in the exact axis of the organ, and that reposition were assisted by the finger behind the uterus. He objected to the restriction of the word "radical" to cure by operation; by patience and quietness retroversion could be radically cured. Where poverty, however, rendered work essential operative treatment gave the best and quickest relief. He had been the first to perform a deliberate ventro-fixation in England.

Dr. J. J. MACAN questioned the propriety of employing the sound for purposes of reposition. Any uterus which could be safely thus replaced could be replaced bimanually by varying combinations of abdominal, vaginal, and rectal palpation. He asked Dr. W. Alexander to express an opinion upon the advisability of drawing the round ligaments out in their original direction when performing the Alexander operation; it was a point upon which considerable stress was laid in continental literature.

Dr. R. T. SMITH referred to the correctness of Hewitt's observations as to the association of neurotic conditions and still more of persistent vomiting with uterine displacement. In debilitated patients there were two conditions which conduced to retroflexions: (1) loss of the normal curvature of the spine, and (2) softness with consequent flexibility of the uterine tissue. Rest and removal of the primary cause were frequently attended by cure of the displacement. Prolapse of the ovaries sometimes resulted from enlargement and displacement of the uterus. If the uterine condition were treated the ovarian trouble disappeared. While approving of Alexander's operation, in cases demanding operative treatment he himself performed ventro-fixation.

Dr. H. SNOW asked Dr. Alexander whether he ever experienced any difficulty in detecting the round ligaments. Referring to the use of a support he said that in many cases it should be used rather with a view to rendering the vagina taut than to keeping the uterus in any position or at any particular angle.

Dr. F. A. PURCELL believed that undue prominence of the promontory of the sacrum contributed to retroflexion. In virgins it was not always possible to insert a pessary.

Dr. P. L. HEBERT said that in the majority of cases the sphincter formed the only obstacle; yet there were cases in which the vagina was cone-shaped, and in these, whether children had been borne or not, a pessary was with difficulty retained.

Dr. BENJAFIELD said that he had listened with great interest to the discussion; but it was frequently difficult to obtain admittance for such cases into hospital, yet the only practical cure for patients in a poor neighbourhood, such as that in which he practised, was operation. To advise the majority of patients to rest and to use douches was utterly impracticable.

Dr. R. H. HODGSON said that frequent reference had been made to the condition of the bowel. What portion of the bowel had been referred to? He failed to see how retroflexion could be attributable to distension of the rectum.

Dr. ALEXANDER, in reply to questions addressed to him, said that he attached no importance to the direction in which the ligaments were drawn out. The secret of finding them was to cut down upon the external oblique, which was a distinct glistening structure, and then seek the extrusion of the external abdominal ring. Except where abnormalities existed the ligaments were always there but in about 1 per cent. of cases were too thin or too brittle to pull out. An apparently delicate ligament, however, on being pulled a little way out of the canal proved thick and strong. He did not operate upon very old people in whom the ligaments were specially liable to be delicate.

The PRESIDENT would classify backward displacements according to whether they were reducible or irreducible. Etiologically, pathologically, clinically, and as regards treatment they would lend themselves readily to that division. The division into retroversion and retroflexion was devoid of practical value. With regard to preventive treatment, the rules laid down by the various speakers as to the avoidance of strain at the menstrual period, examination and replacement of the womb after miscarriage or labour, and repair of the perineum or cervix if lacerated would meet with general acceptance. He doubted if the very temporary use of stems sanctioned by those favouring their employment could possibly be of permanent benefit, while the risks attending their use were admitted by all. The discussion had turned to a great extent upon the relative merits of ventro-fixation and Alexander's operation. The latter required skill and practice, while the former was devoid of

any special difficulties and therefore evidence in its favour would be forthcoming from many quarters. The fundus was seldom bound down unless the uterine appendages were the seat of chronic inflammatory mischief and he regarded the position of the uterus as of secondary importance when the primary trouble had been removed.

Dr. MACNAUGHTON-JONES, in replying, said that each time he had referred to the bowel he had specified the overloaded rectum alone as a participating cause of the retroversion. He considered a stem pessary to be both unscientific and dangerous and the remarks of some of those who advocated its use had only tended to show that it was so. Lawson Tait was quite right in urging the comparatively rare necessity for the employment of the sound, either in diagnosis or as a repositor. As to a pessary, each should be adapted according to the anatomical peculiarities of the parts—the vagina and uterus. Dr. Macnaughton-Jones also dwelt on the importance of prophylaxis which prevented the necessity for either pessary or operation. He reminded the Fellows of the propositions which he had made with regard to the differentiation of those cases in which mobility and reducibility indicated either expectant or operative treatment, even when there were associated adnexal conditions. The cases demanding colpotomy without fixation were distinct. The vital points agitating gynæcologists with regard to operation, once any method was determined upon, were: (1) that method most suitable to the mobile and reducible uterus during and after the child-bearing period; (2) that appropriate to retroflexion with adnexal complications and adhesions; and (3) the bearing of the method on child-bearing and the consequences which followed to the parturient woman during labour. Abroad either Alexander's or the Alexander-Adams operation, with its various modifications, extra-peritoneal or intra-peritoneal, was performed by such well-known gynæcologists as Doléris, Cohn, Küstner, Kronig, Veit, Karl Peters, Delagénière, Bamberger, Stocker, Füth, Rumpf, Kocher, Doyen, and others; in America, by quite a number of surgeons, including Goldspohn, Edebohls, Mundé, Parker, Newman, and Kellog; while Lapthorne Smith of Montreal had performed a very large number of operations by this method. Taking the records of 1141 operations, the particulars of which Dr. Macnaughton-Jones quoted, there had been but two deaths. The plan of looping intra-peritoneally the round ligament, as advocated by Delagénière, Mann, Jacobs, and many others, or the fixing of the loop into that which tied off the ovary and tube if these be removed, had not been referred to. Up to the end of 1896 Martin had performed 400 vaginal fixations with only four deaths. Vineberg's operation of vaginal fixation of the broad and round ligaments had not in that operator's hands been followed by any death. Howard Kelly in his utero-suspension had not more than 1 per cent. of failures. Fixation of the broad and round ligaments to the parietal peritoneum was performed by some operators. Reviewing the statistics as published by a number of operators up to the present year it would appear that the choice lay mainly between three procedures, or the modifications of these, the Alexander-Adams operation, ventro-fixation, and Kelly's utero-suspension. It was clear that Alexander's operation could not be the simple procedure that some represented it from the modifications of it which were forced by necessity upon the most expert operators. Finally, the age of the patient, the complications of the displacement, and the operator's views with regard to the influence of the special operative interference on pregnancy and labour were the points that would determine the selection of any operation.

Dr. ALEXANDER read a paper on Posterior Vaginal Cœliotomy in operations for Pelvic Disease. During the preceding two years he had performed 94 posterior vaginal cœliotomies for various diseases of the pelvis, exclusive of such conditions as cancer, uterine fibroids, or other diseases where Douglas's pouch had been opened as a small part of a more extensive operation. As showing that vaginal cœliotomy was not a specially favoured operation of his he said that he had performed in all 1567 operations during the same period, and these included 204 cœliotomies in which other routes had been adopted. He had become gradually more impressed with the ease and shorter duration of the vaginal operation, and the more rapid recovery of the patient. He lost but two cases, notwithstanding that he had operated for such conditions as hydrosalpinx, pelvic cellulitis, pyosalpinx (14 cases), hæmatocele, fibroid ovaries, peri-rectal abscess, ovarian cysts, dermoid cysts of the ovary, cystic ovaries, abscess of the ovary, &c. One of the deaths was due to pleuro-pneumonia. The second occurred in a case of abscess of the right ovary, in which, a great part of the organ being healthy, he was tempted to save it. In all similar previous cases he had removed the suppurating movable structure. The ligature was the best method of treating the stump, but he generally employed forcipressure in this operation.

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WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on May 3rd, Dr. F. F. Schacht, the President, being in the chair.—The minutes of the last meeting were read and confirmed.—Dr. William Hunter read a paper on the Infective Nature and Septic Origin of Pernicious Anæmia, the paper being illustrated by a series of beautiful lantern slides. Dr. Hunter said that pernicious anæmia had hitherto been regarded as a mysterious disease and that it occurred without any discoverable cause. It had been taught that the chief factors accounting for its appearance were insufficient nutrition, unhealthy surroundings, hæmorrhages, and wasting discharges; that pernicious anæmia, in short, was a provisional shelter for a multitude of cases of possibly variable origin. The symptoms were formerly regarded as in nowise distinctive, but simply those arising from the anæmia, and, further, no morbid state or anatomical condition could be shown to be peculiar to this disease. Dr. Hunter had investigated this disease closely for some 15 years and had arrived at certain definite conclusions which were as follows. 1. As regards its nature the disease was not merely a specialised form of anæmia, but it was a definite and well characterised special infective disease localised to the mucosa of the alimentary canal, and one in which sepsis, both oral and gastric, appeared to play an essential and important part. It was accompanied by definite infective lesions of the mucosa, difficult to discover post mortem, but characterised when observed during life in the mucosa of the tongue as a glossitis. This was not the result of the anæmia and was very persistent, coming and going when once established in a most remarkable manner and independently of any obvious cause. This unhealthy condition of the mucosa was due in the first instance to long-standing oral and gastric sepsis the result of suppurating and necrosed teeth and this condition permitted a special infection to occur. 2. The typical mode of development was as follows: a history of oral, gastric, or intestinal trouble extending over many years without any anæmia, more or less suddenly followed by an anæmia out of all proportion to the severity of the symptoms and denoting the supervention of a new factor—viz., increased hæmolysis dependent upon a new and special infection of the alimentary canal. On inquiry it would generally be elicited that at or about the commencement of the anæmia the patient suffered from sores or lesions of the tongue. Experience lent no support to the view that ordinary anæmia-producing factors, if only severe enough, could give rise to this form of anæmia, and cases of the kind could be successfully excluded, not only during life, but still more easily after death, by the absence of the clinical features and anatomical changes which were found to characterise the disease. 3. Anæmia was only one of the symptoms of this disease and there were at least three other groups of symptoms—viz., hæmolytic, oral and gastric, and intestinal and toxic symptoms, these being caused by the infection which lay at the root of the disease, and being more or less pronounced in every case of pernicious anæmia. They had one factor in common—viz., their periodicity, variations in the severity of the symptoms being common from week to week corresponding with the activity of the infective process. By these symptoms the disease could be diagnosed with certainty during life and after death by the no less characteristic pigmentary changes in the liver. With regard to treatment strict antiseptic treatment both of the mouth and of the gastro-intestinal tract must be repeatedly carried out. Arsenic and iron supplemented in suitable cases by anti-streptococcic serum injections were found to be very useful.—The President had listened to the paper with great pleasure. It had been worked out with great care and was full of interesting points.—Dr. Herbert Snow thought that this was one of the most lucid papers that had ever been read before the society, but many of the conclusions arrived at were open to discussion. For instance, if the septic infection described were primarily due to carious teeth,

how was it that while such a condition was so common pernicious anæmia was so rare? What was the pathogenic organism concerned? What were the tongue lesions like? What was the percentage of cases curable? A large number of cases supposed to be due to pernicious anæmia had been eventually proved to be due to tape-worm or to cancer, especially of the stomach.—Dr. Hunter, in reply, referred to his book and to other communications which he had written on this subject to answer many of the questions. He emphasised the point that sepsis alone was not the cause of the disease but the channel and basis by which the specific organism entered.—Dr. Stanley Melville read a description of 16 cases of Ulcerative Stomatitis occurring in his practice at the same time, all presenting more or less the same characteristic features—viz., local conditions, marked constitutional disturbance, moderately high fever, and subsequent severe prostration. The occurrence of several cases in the same house was suggestive of some epidemic origin. In most of the cases the gums were swollen and bleeding, small ulcers formed in the mouth and spread rapidly, vomiting with abdominal pain then set in, accompanied by great wasting and prostration. The submaxillary glands were swollen and tender and a petechial rash appeared on the arms. Treatment consisted of antiseptics, stimulants, ammonia, and bark. The nature of the infection was obscure. Microscopical examination revealed nothing. The milk-supply was suspected but was found not to be the vehicle of infection.—Dr. Charles Buttar read notes of a case of Pneumomycosis. The patient who had returned home from India was a stout woman, aged 52 years. She had suffered from palpitation and shortness of breath for some time and had the usual symptoms of emphysema of the lungs. In January she caught cold and was much troubled with shortness of breath and cough, the symptoms being worse at night. The tips of the fingers were slightly blue and the tongue was coated with thick fur. Little was to be heard in the lungs with the exception of a few moist sounds at the bases. Pains were felt in the back and in the chest. Expectoration was free, consisting of clear mucus, a little pus, and many black specks. There was slight œdema of the legs. The temperature was raised to between 98° and 100° F. Soon after the patient complained of sore-throat and the palate became red and inflamed and covered with aphthous patches, the sputum becoming very free. As she had been ill for four weeks the sputum was examined and was found to be free from tubercle bacilli but it contained enormous quantities of oidium albicans with some streptococci. The patient gradually improved and eventually recovered. There was little doubt that she was suffering from emphysema and bronchitis complicated by the presence of the oidium albicans which contributed to keeping up the trouble, but the question as to whether the presence of the fungus was primary or secondary was one which was open to doubt.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—A meeting of this society was held at Manchester on April 19th, Dr. T. B. Grimsdale, the President, being in the chair.—Mr. Stanmore Bishop (Manchester) showed three specimens of Uterine Fibro-Myomata removed by abdominal hysterectomy. The first was from a multipara, aged 49 years, in whom there had been a rapid increase of the growth and symptoms during the recent few months. The tumour was removed by Baer's operation. Although the uterus was divided at the level of the internal os no trace of the right Fallopian tube was seen in the specimen. It was apparently a fibroid occurring in an irregularly-developed uterus. The patient recovered well. The second specimen was from a married woman, aged 55 years. The symptoms had been present for 18 years and had rendered the patient a complete invalid. The tumour was very large, multiple, and adherent. One subserous pedunculated mass was calcified and a submucous growth had become necrotic, causing foul discharge. Total removal by Doyen's method was performed. Recovery was retarded by the formation of an abscess in the left iliac region. This was opened and the subsequent progress was satisfactory and recovery was complete. The third specimen was from a nulliparous married woman, aged 42 years. The growth was fibro-cystic and it weighed 19lb. It was removed by C. Martin's method of total hysterectomy and the patient did well.—Dr. Lloyd Roberts (Manchester) showed an Ovarian Tumour with Twisted Pedicle. The swelling had been noticed for 12 months. Three months before operation, and again six days before, there had been attacks of severe abdominal pain with vomiting. It was probable that the rotation occurred on these occasions and that hæmorrhage took place on the latter date. The cyst contained 100 ounces of dark chocolate-coloured fluid and the pedicle was twisted three times on itself, its vessels being thrombosed. The patient made a good recovery.—Dr. W. E. Fothergill (Manchester) exhibited: (1) A Uterine Cast from a case of Dysmenorrhœa having the shape of the uterine cavity, in which there was a small central space with no epithelial lining and the structure of which was composed of a delicate fibrous stroma with numerous round cells but no glands or vessels; (2) a Fibro-myoma of the Round Ligament from a patient who was suffering from peritonitis, the growth being found in the sac of an inguinal hernia and its pedicle being proved to be the left round ligament, the microscope showing it to be composed of fibro-myomatous tissue; and (3) Water-colour Drawing of Multiple Ulcers of the Inner Side of the Thigh and Vulva, the primary condition of which was one of kraurosis and the ulcers presenting epitheliomatous characters on microscopical examination.—Dr. J. W. Martin (Sheffield) showed a specimen of Double Pyosalpinx from a patient, aged 35 years, who had been married for seven years and was sterile. The history dated from a few months after marriage. There was no evidence or history of gonorrhœa. The tubes were removed and the patient had made a rapid recovery.—Dr. J. E. Garner (Preston) showed the following two specimens: 1. A Proliferous Ovarian Cyst removed from a patient who was between three and four months pregnant. There had been severe pain for about a fortnight before operation. The pain did not cease and abortion took place on the second day when the patient died from collapse. The fluid in the cyst was black. 2. A Fibro-sarcoma of the Ovary. The patient was a multipara, aged 35 years. The tumour had been noticed for about 15 months but it had rapidly increased during the last three months. The tumour was easily removed. There was much ascites. The peritoneum was flushed with normal saline solution and closed without drainage. Recovery was uninterrupted.—Dr. E. T. Davies (Liverpool) showed: (1) Multiple Fibro-Myomata successfully removed from the lower uterine zone by morcellation per vaginam; and (2) Tuberculous Salpingitis associated with tuberculous peritonitis and ascites. The tubes were removed, the fluid was evacuated, and the peritoneum was flushed with normal saline solution. The wound was closed without drainage. The improvement was so far well marked.—Dr. W. J. Sinclair (Manchester) showed the specimen from a case of Tubal Pregnancy which had advanced to between five and six months without rupture of the tube. The sac and its contents were removed by abdominal section. The tumour was situated in front of and above the uterus and was very adherent and difficult to separate. A careful examination of the relations of the uterus and the ovaries and tubes with the sac proved that the latter was formed of the wall of the inner third of the Fallopian tube. There was a distinct interval between the sac and the uterus proper and the tube could be distinctly traced into and out of the cyst. There had been no rupture. The patient recovered.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.—The last meeting of the session was held on May 3rd, Dr. Gordon Black, the President, being in the chair.—Dr. Christy Wilson (Doncaster) read a paper on four cases of Perforation of the Stomach and Duodenum successfully treated by operation.—Mr. H. Littlewood said that he had operated on 12 cases of acute perforated gastric ulcer and three cases of acute perforated duodenal ulcer. The gastric ulcers were all in women and the duodenal in men. Of the patients suffering from gastric ulcer only four had made complete recoveries; one lived for two or three months and died from an abscess in the lung and emphysema on the left side; another lived one week; and the remaining six died within a few hours of the operation, one of these dying as soon as the abdomen was opened. The cases of duodenal ulcer were all operated on after 36 hours from the time of perforation and all terminated fatally. Mr. Littlewood thought that the shorter the interval between the perforation and the operation the more likely were the cases to terminate successfully. In two of his successful cases he had not drained the peritoneum.—The President, Mr. F. Mayo, Mr. Basil Hall, and Mr. B. G. A. Moynihan also took part in the discussion.—Dr. J. Stewart read notes of five cases of Tubal Gestation. He

field that it was not necessary to operate in every case of ruptured tube or tubal abortion, as four of his five cases recovered without operation. He preferred to advocate the plan of waiting and watching, and if any untoward event occurred to be prepared to operate at once, thus in a great many cases avoiding incisions in the abdominal wall, risks of ventral hernia, and interference with pelvic organs. In the first case the hæmorrhage was so slight and the length of time from the last period so short—viz., five weeks—that he looked upon it as a case of tubal abortion. Yet of the series it was the only case in which shock was a pronounced symptom, the patient nearly dying on two separate occasions from profound shock, an interval of seven days occurring between each attack. With the exception of shock all the classical signs were present in the five cases. In all there were amenorrhœa and a mass in the pelvis. In Cases 2, 3, 4, and 5 the amount of pelvic effusion was enormous. In Case 2 the effusion was looked upon as extra-peritoneal as there was well-marked stricture of the rectum, with tape-like motions. In four of the five cases a decidual membrane was present. The bleeding into the pelvis was very "quiet" in character (as it gave rise to few symptoms excepting the increasing size and discomfort of the pelvic mass) if Case 1 and the secondary hæmorrhage in Case 5 might be excepted. Cases 1, 3, 4, and 5 were regarded as intra-peritoneal, the latter being certainly so. The non-operative cases were kept in bed from six to 15 weeks, no trace of any pelvic storm taking place. The fifth case did well up to the seventeenth day after primary rupture, when secondary rupture took place and the patient almost succumbed. Dr. Stewart removed the tube under ether, leaving the ovary behind. The patient almost succumbed on the table but recovered as soon as flushing was commenced. Drainage was maintained for 24 hours. The silk ligature appeared through the drain track on the sixteenth day after the operation. The patient made an uneventful recovery. The tube, decidual membrane, and silk ligatures from the case were shown.—Cases and specimens were shown by Dr. S. Lodge, jun. (Bradford), Dr. T. Churton, Mr. Littlewood, Dr. J. B. Hellier, Mr. Moynihan, Mr. Constable Hayes, Mr. Lawford Knaggs, and Dr. E. F. Trevelyan.—The annual meeting of the society was held at the close of the ordinary meeting. The following officers were elected for the ensuing session:—President: Dr. A. G. Barrs. Vice-Presidents: Dr. W. L. Hunter (Pudsey) and Mr. C. Richardson. Committee: Mr. Edwin Lee (Dewsbury), Dr. F. A. Mouillot (Harrogate), Dr. H. J. Clarke (Doncaster), Mr. B. G. A. Moynihan, Mr. H. Secker Walker, Mr. C. J. Wright, Dr. F. W. Robinson (Huddersfield), Dr. Gordon Sharp, Dr. S. Long (York), Dr. Priestley Leech (Halifax), Dr. Gordon Black (Harrogate), Dr. W. A. Evans (Bradford), Mr. Edwin Roberts, Dr. A. H. Bampton (Ilkley), and Mr. Walter Thompson. Honorary secretaries: Dr. E. F. Trevelyan and Mr. Lawford Knaggs.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—A meeting of this society was held on April 24th, Dr. John Edgar, Vice-President, being in the chair.—Dr. Andrew Richmond read notes of a case of Hydatidiform Mole. The patient, a young unmarried primipara, complained on March 5th, 1901, of sickness and vomiting of two weeks' duration. For the same time there was a blood-stained vaginal discharge, commencing with a menstrual period. The previous menses had been normal. The mammary areolæ were darkened, and the uterus was found to be enlarged. Early pregnancy was diagnosed. The vomiting did not yield to treatment, but it got worse, all food being rejected, while the pulse became rapid and feeble. By the 22nd the uterus had increased rapidly and out of all proportion to a normal pregnancy, and as it felt soft and boggy a diagnosis of hydatid mole was made. At this date the abdomen at the umbilicus measured 26 inches round, and three days later it was 28½ inches. The patient had to be fed by nutrient enemata, but as her condition became rapidly worse abortion was induced on the 29th in Paisley Infirmary. On the 31st septicæmia supervened and in spite of active treatment the patient died on April 7th. A post-mortem examination made the next day revealed a widespread septic peritonitis. The source of infection was found to be from a laceration or wound in the posterior vaginal fornix, leading to a semi-gangrenous area in the pouch of Douglas. The endometrium was also gangrenous, but the Fallopian tubes were not affected. As no violence was used and as the uterus expelled its contents naturally it remained unknown how the wound in the fornix originated. The strictest aseptic and antiseptic precautions had also been observed.—Dr. Edgar read notes of a case of Carcinoma Cervicis for which vaginal hysterectomy was performed. The case was brought forward to show the advantage of curettage and the application of formalin to the growth. This was done when the patient, aged 43 years, was first seen, as she was too ill to permit of a major operation. Three months later the patient was well and strong; she had gained 28 lb. in weight, was free from discharge, and she menstruated regularly and normally. A vaginal hysterectomy was then performed with success.—Dr. John H. Teacher gave a demonstration of Placental Structures at different months of Pregnancy, illustrated by lantern-slides and microscopic sections.—Dr. J. K. Kelly opened a discussion on the Causation, Nature, and Treatment of Retroversion of the Non-gravid Uterus. After referring to the normal position of the uterus and the factors which kept it there, he treated of the various causes of retroversion and classified them into mobile and fixed, primary and secondary, according as they were independent of, or merely an incident in, descent of the uterus. He regarded the wearing of a pessary as sufficient treatment in the majority of mobile retroversions. If the pessary failed he performed ventro-fixation. He had abandoned vaginal fixation and Alexander Adams's operation. In cases of fixed retroversion it was sometimes possible to break down the adhesions under anæsthesia and to bring the uterus into a good position and to retain it there. Where this was impossible, and in other cases demanding operation, as for diseased appendages, he performed laparotomy, freed the uterus, removed the tubes and ovaries if desired, and finished by a ventrofixation to the anterior abdominal wall.—Further discussion was postponed till next meeting.

BRISTOL MEDICO-CHIRURGICAL SOCIETY.—The eighth meeting of the session of this society was held in the medical library of University College, Bristol, on May 8th, Dr. D. S. Davies, the President, being in the chair.—The President proposed, and it was carried, "That a vote of congratulation be accorded to the honorary secretary (Mr. Paul Bush) on his receiving the honour of being made a Companion of the Distinguished Order of St. Michael and St. George for services rendered in connexion with the Boer War."—Dr. J. O. Symes showed Specimens of Blood with Malaria Organisms.—Dr. A. E. Aust Lawrence read a paper on Some of the Hæmorrhages of Pregnancy.—Dr. Barclay J. Baron reported a case of Paralysis of the Right Vocal Cord due to thoracic aneurysm and showed skiagrams taken by Mr. J. Taylor.—Dr. E. Markham Skerritt, Dr. P. W. Williams, Mr. W. H. Harsant, Mr. Paul Bush, Dr. F. H. Edgeworth, and Dr. K. Wills discussed the case.—Dr. J. Michell Clarke read a paper on the Treatment of Inveterate Cases of Sciatica.—Mr. H. F. Mole, Mr. Harsant, Dr. Edgeworth, Mr. C. E. S. Flemming, Dr. C. Elliott, Dr. J. Barclay Baron, Dr. G. Parker, and Mr. J. Hancocke Wathen remarked on the paper.—Dr. Parker reported a case of Congenital Obliteration of the Bile Ducts and showed specimens.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.—A meeting of this society was held on May 13th, Mr. Henry E. Clark, C.M.G., the President, being in the chair.—Dr. A. Ernest Maylard showed a case in which he had performed Colocolostomy for Stricture at the Upper End of the Sigmoid Flexure, and read notes of another case in which he had treated Multiple Tuberculous Strictures of the Small Intestine by Jejuno-colostomy.—Dr. James Lawrie (Greenock) showed a case in which Excision of a Ruptured Traumatic Aneurysm of the Femoral Artery at the Apex of Scarpa's Triangle had been performed.—Dr. Henry Rutherfurd showed (for Dr. Newman): (1) A Resonator for Detecting Calculi in the Lower End of the Ureter; (2) Harris's Urine Segregator; and (3) Schlagintweit's Cystoscope.—Dr. Edward J. Primrose showed a specimen of: (1) Patent Pericardium; (2) Solitary Kidney with Single Ureter; and (3) Urinary Bladder with a Horizontal Septum—all from the same subject.—Fresh specimens:—Dr. Lawrie: Epithelioma of the Tongue.—Professor Muir: Sarcomata in the Dura Mater, Lungs, and Liver.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The seventh meeting of the forty-fifth session of this society was held at the Royal Kent Dispensary, Greenwich, on May 3rd.—Dr. Septimus Sunderland delivered

his presidential address on Uterine Hæmorrhage: its Causes and Treatment.—After the address a most enjoyable smoking concert was provided by the generosity of the President. The following artists contributed to the amusement of the evening:—Mr. Bowen Williams, Mr. F. H. Cheesewright, Mr. E. Wallace, Mr. Carl Brandt, Mr. Alec White, Mr. W. Keast, and Mr. Stanley Graham.—The annual dinner of the society will take place at the Hotel Cecil on Tuesday, June 18th.

# Reviews and Notices of Books.

*The Science of Hygiene: a Text-book of Laboratory Practice.* By WALTER C. C. PAKES, D.P.H., F.C.S., Bacteriologist to Guy's Hospital and Demonstrator of Sanitary Science and Bacteriologist in the Medical School, &c. London: Methuen and Co. 1900. Pp. xv. 306. Price 15*s*.

THE title of this book is somewhat misleading, as it deals almost entirely with the arts practised by the hygienist in his laboratory. It is, however, a very excellent and useful volume, practical in character, wide in scope, and accurate in detail. It covers the whole of the laboratory work required from candidates for the various diplomas in public health, and, indeed, it covers much more than this, and will be found a good work of reference for medical officers of health generally. We know of no other single book which attempts, much less succeeds in, so wide a field.

The book is divided into five parts. Part I. deals with Bacteriology purely from the laboratory point of view. It gives a full and detailed account of the technique of the subject, including the making of media, and contains a scheme for the examination of the bacteria most important from the hygienist's standpoint, together with an account of the bacteriological investigation of water, air, soil, milk, &c. It appears to be a very adequate and accurate course of laboratory work and cannot fail to be of much utility. We have few criticisms to pass upon it, but we note the use of the term "hypomycetes" for hyphomycetes, and we fail to see what advantage the German word "fleischwasser" has over the English terms "broth" or "meat infusion." In describing the mode of preparing agar-agar plates we find no reference to the convenient method of allowing them to solidify and then inoculating the surface only.

Part II. deals with Microscopic Hygiene and is in many respects the most novel and useful part of the book. It describes the appearances of the different starches, fibres, and parasites which the candidate for a public health diploma is expected to recognise, and the microscopic characters of various foods. This part is illustrated profusely and fairly well, which adds much to its utility. We doubt whether pediculus vestimentorum can be so readily distinguished from pediculus capitis as the author imagines. We should also be glad to learn why the organism of relapsing fever, described as belonging to the bacterial genus spirillum (or spirochæta), is positively stated to be a protozoön, although we know almost nothing about its life history.

Part III. deals with the Chemical Analysis of Water, Foods, and Air, and seems an excellent laboratory guide, founded as it is on the author's own experience. An admirable feature of this, as of other parts of the book, is that everything is explained and not merely stated. We may call attention to a misprint on p. 191, in the equation showing the reaction between silver nitrate and sodium chloride.

Parts IV. and V. deal with Physics and Vital Statistics in a theoretical way and apart from laboratory work. These sections call for no special comment. We would repeat, in conclusion, that Mr. Pakes has produced an eminently useful and practical book which should find much favour with those for whom it is written since it has the great advantage of comprising within one cover information which can otherwise only be gathered from several different sources.

*Manuel de Thérapeutique Clinique: Accouchements et Maladies des Femmes en Couches.* (*Manual of Clinical Therapeutics: Labour and the Diseases of the Puerperal Period.*) By M. GAULARD and M. BUE. Paris: Vigot Frères. 1901. Pp. 602. Price 8 francs.

THE importance of the diseases of the puerperal period can hardly be over-estimated, and since it is impossible within the bounds of the ordinary text-book for students to consider them in any great detail such a manual as this is of great service. In the present instance the authors have collected a great deal of information and their own experience and that of others are fully summarised. The teaching is, of course, mainly that of the French school of midwifery and many of the recommendations are therefore novel and at times contrary to English practice as taught in our medical schools. The numerous valuable contributions to the science of midwifery made by such French obstetricians as Pinard, Tarnier, Budin, and Varnier, and the fact that the operation of symphysiotomy is practised to a greater extent in France than in almost any other country, render the perusal of this book of great interest. A manual in the English language dealing with the diseases of the puerperium is at the present time a desideratum, but in the absence of such a book we can recommend students and practitioners either the present work or the well-known monograph of Vinay.

After a consideration of the proper treatment of normal and abnormal varieties of presentation and the treatment of the delivery of the placenta the disorders of the various systems that may occur during pregnancy are described. A section upon the Effect of General Diseases upon Pregnancy and the Puerperium follows and then come chapters upon Diseases of the Ovum, Extra-uterine Gestation, Abortions, and Obstruction to Labour produced either by Abnormalities of the Fœtus or of the Pelvis. The two concluding chapters treat of the Various Forms of Septic Infection and the Disorders of the New-born Child.

*Modern Medicine.* By JULIUS L. SALINGER, M.D., Demonstrator of Clinical Medicine, Jefferson Medical College, &c.; and FREDERICK J. KALTEYER, M.D., Assistant Demonstrator of Clinical Medicine, Jefferson Medical College. London and Philadelphia: W. B. Saunders and Co. 1900. Pp. 802. Eight Plates. Price 17*s*.

THIS is one of those works of which a short review only is necessary. The aim of the authors has apparently been to render the book a synopsis of our present knowledge of medicine without entering into the details as to pathology or theoretical considerations, but we cannot state that a successful text-book is the result, and omissions and errors are constant.

The first part of the volume is concerned with descriptions of physical diagnosis, clinical bacteriology, the examination of the gastric contents, urine, blood, and fæces. There is nothing new in the pages devoted to these subjects.

Turning to the major portion of the work, that devoted to consideration of the various diseases, we again find much to criticise. Pathology receives but scant attention and the symptomatology is frequently insufficiently described. There are some exceptions, however, such as the account of "Infective Endocarditis," which is accurate and well given.

In the description of physical signs, too, the authors again fail in many instances to give a sufficiently full idea to the reader of the many anomalous cases that may occur at the bedside. They describe a characteristic case, but the student who relies on such data will find that there are more exceptions than cases which follow the signs laid down in this

text-book. We do not think that the book is likely to become popular in this country.

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*Materia Medica and Therapeutics, with reference to the Most Direct Action of Drugs.* By FINLEY ELLINGWOOD, M.D., editor of the *Chicago Medical Times*. With a Condensed Consideration of Pharmacy and Pharmacognosy by Professor LLOYD, Ph.D., of the Eclectic Medical Institute of Cincinnati. Chicago: Medical Press Co. 1900. 8vo, pp. 706. Price $5.00.

THIS work on materia medica, recognising the United States Pharmacopœia only in passing and our British Pharmacopœia not at all, will probably not meet with a very cordial reception in the United Kingdom. The parts of the work descriptive of the materia medica are thorough and good and the classification is satisfactory. It is evident that the author is a botanist of no mean order and that he has taken the very greatest trouble to give complete descriptions of every vegetable drug with which he deals. All the medicines are classified as "agents acting upon" one or other system or part of the body, and organic and inorganic drugs find themselves side by side in the same group and chapter. It is probable that the author's therapeutics, however, will not be particularly well received. The style in which therapeutics are dealt with is scarcely scientific; it is over-confident, and members of the profession in England, who are seldom "eclectic," will not be attracted by the statement that hints have been taken "from eminently irregular sources." To be perfectly honest, we are obliged to add that a great deal of the author's introduction suggests that he has approached the study of medicinal treatment from an empiric standpoint. "Eclecticism was originally composed of many dissonant facts. These have been fused or amalgamated until it now has an essentially exact constitution ..... a characteristic individuality which wins for it the approval of all consistent observers." In this style is the book built up, and no one with a sense of humour will fail to glean some amusement from this attempt to make "eclecticism" a school in itself founded on the "gems of truth" gathered and rescued from the teaching of the schools of allopathy and homœopathy and elsewhere.

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*The Dreamers: An Original Play in Five Acts.* By GEORGE H. R. DABBS, M.D. Aberd. Shanklin, I. W.: Silsbury Brothers. 1901. Pp. 45. Price 6*d*.

DR. DABBS has published "The Dreamers" in book form before it has been acted because, as he states in a prefatory note, "no author living amid provincial surroundings, who has not the intention of wasting money on expensive and useless experiments, can ever hope to secure for his work another kind of hearing." We need not discuss the accuracy of this statement at any length, for many things might be said on both sides of the question which it raises without any definite conclusion being reached, and it will be enough to say that "The Dreamers" strikes us as being a better written and more interesting piece than are many of the plays which have been acted and which have secured some measure of commendation, while at the same time it is probably better as a story told in dialogue than it would be if presented without alteration on the stage. It is a drama of modern life in which the principal characters are representatives of Capital on the one side and of Labour on the other, the representatives of Labour being prominent members of continental secret societies which are on the brink of appealing to very extreme measures indeed to bring about their ends. One of the continental secret envoys, actuated by motives that are a little obscure, combines the objects of his society with endeavouring to exact blackmail from the wife of one of the capitalists, a lady who has a past with which another capitalist is connected. But we have no intention of giving away Dr. Dabbs's plot; we have indicated that it is of a sensational, almost of a melodramatic nature, and we need only add with regard to it that it supplies at the ends of Act III. and Act IV. two highly dramatic and interesting scenes which we should say were eminently suitable for stage purposes. The characters are clearly and firmly drawn and their characterisation should become even more marked if "The Dreamers" were ever to see the foot-lights. The drawback to stage production to which we have referred seems to us to lie in the fact that a good deal is talked of at times which is not brought before the audience in the action, whereby occasionally there might arise a little difficulty in following matters of detail that are also matters of importance. A playwright who desires his play to be produced by others, as Dr. Dabbs from the note that we have quoted would seem to do, has to remember that managers who may be unwilling to "waste money on expensive and useless experiments" have to consider the intelligence of the audiences for whom they must cater if they want to make money, and that the measure of that intelligence is the hearing and understanding capacity of a rather dull person in the middle of the pit, who will be no deafer or duller than many other persons in the stalls and the dress circle; while neither in stalls nor pit is it possible to turn back, like the reader in an arm-chair, to a previous page in order to pick up a lost thread or to recall what has gone before. Still difficulties of this kind can usually be got rid of by coöperation between a willing author and an intelligent stage-manager, while the same two in partnership might contrive a means of dispensing with Dr. Dabbs's Fifth Act, which from the point of view of stage production is as undesirable as is the proverbial fifth wheel of the coach. Beyond this questions of probability as to how much an audience will stand in the nature of anarchist plotters who give their victims cigarettes that kill in a few whiffs, and whether gentlemen and ladies in evening dress control or endeavour to control anarchists from modern English drawing-rooms, are elements in the choice of a theatre, but they need not be discussed by a reviewer. "The Dreamers," from a literary point of view, is well worth reading and we commend it to the attention of those who might give it a public hearing to their own advantage.

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## LIBRARY TABLE.

*A Practical Guide to the Public Health Acts: a Vade Mecum for Officers of Health and Inspectors of Nuisances.* By THOMAS WHITESIDE HIME, B.A., M.D. Dub. Second, much enlarged, edition. London: Baillière, Tindall, and Cox. 1901. Pp. 1096. Price 15*s*. net.—This is a veritable mine of information of a somewhat heterogeneous nature, a limp leather-bound octavo volume of lvi. + 1040 pages, with sundry illustrations. The first edition of the book was a small, handy pocket volume, but the author in the the second edition has somewhat destroyed the portable character of the volume. The book may best be described as a guide to the public health statutes, regulations, orders, by-laws, and memoranda, while it embraces in addition essays upon multitudinous subjects bearing directly or indirectly upon the public health. It is impracticable even to indicate all the contents of this volume, but it may be said that the duly-qualified sanitary official will derive much assistance therefrom. We say the duly-qualified official because we feel that the book is more fitted for him than for the student. For the latter the book is, perhaps, a little too complicated, and the rather decided views of the author upon certain subjects render the work more fitted for the matured judgment and critical faculty of the sanitary

officer than for the student. Moreover, the scheme of the book is not altogether easy to follow notwithstanding the index and that the Acts are arranged in chronological order. What the author terms "hints" abound in the book and some of such hints are most useful. We have "hints on meat," "hints on statistics," &c., while such subjects as country holidays for poor children, soup kitchens, &c., receive their share of attention. Specimen examination papers for the Diploma of Public Health are within the scope of the volume and in the appendix will be found a selected list of important sanitary law cases which should prove of great value.

*Comment la Route crée le Type Social.* (*How the Route creates the Social Type.*) By EDMOND DEMOLINS. Second edition. Paris: Firmin-Didot and Co. 1901. Pp. 472. 8vo. Price 3 francs 50 cents.—The actual substance of this work was embodied in a series of lectures given by the author before the Geographical Society in Paris. Drawing largely on the information gained during 25 years' research by M. Henri de Tourville, the author explains to his own satisfaction that the great diversity among the races that have peopled the world has been brought about by the fact that, all originally starting from man's birthplace, the Garden of Eden, different groups have followed different trade routes across the earth and have become modified by their surroundings, so as to form the present social types. There are certain well-recognised great routes of travel and trade over the world, and the author describes in much detail some of, if not all, the types produced by each of these routes. But the work has little or no interest to the ordinary physician or surgeon and is practically an essay in ethnology. There are no illustrations but a few diagrammatic maps.

*Transactions of the Society of Anæsthetists.* Vol. III. London: Medical Publishing Company. 1900. Pp. 168.—This volume contains a valuable paper by Dr. G. H. Savage on the Relationships between Anæsthetics and Insanity. Although the author finds no evidence of severe mental aberration being initiated in persons who have not had a predisposition to insanity, or actual attacks of insanity, he has met with many individuals among both classes in whom attacks have resulted upon the use of anæsthetics. He admits no difference between various anæsthetics as regards the onset of such attacks nor does he know of any way of obviating the liability to these nerve storms and the subsequent mania. We gather that Dr. Savage would not condemn anæsthesia in the case of those actually insane at the time of the operation and has not found their subsequent condition worse. An instructive discussion upon the "After-Effects of Ether Inhalation upon the Respiratory System," by the members of the society, is given. The conclusions are practically those generally adopted at the present time—viz., that the respiratory troubles following ether are as a rule slight and that when broncho-pneumonia or other serious sequelæ occur they do so as a result of exposure either during the operation or in the subsequent removal of the patient to the ward. Mr. Edgar Willett contributes a useful paper on the Administration and Choice of Anæsthetics for Infants and Young Children and recommends the use of a freshly-prepared mixture of equal parts of ether and chloroform. He gives this by means of a Skinner's frame or double layer of lint, supplying the mixture guttatim from a drop bottle. Some very instructive cases are recorded by Dr. McCardie, Mr. Rickard Lloyd, Mr. Carter Braine, Mr. E. M. Corner, and others. We congratulate the society upon a most servicable volume which must appeal by its own merits to all who take an interest in, or are anxious to keep abreast of, the department of science with which these transactions are concerned.

*Royat: Indications Thérapeutiques Méthodiquement Classées.* (*Royat: Therapeutic Indications Methodically Classified.*) By Dr. A. BOUCHINET, consulting physician to the Spa. Paris: J. B. Baillière et Fils. 1901. Pp. 104. Price 1*s.* 8*d.*—The mineral springs at Royat have long been recognised as useful medicinal agents in the treatment of anæmia in its various forms and of all painful affections of the joints. The author, who has been practising for the last 10 years as physician at the spa, is anxious to extend the sphere of usefulness of these alkaline waters, and this little book is intended to supply accurate information about everything connected with them. There are four of them, with temperatures ranging from 20° C. to 35° C.—that is, from 68° F. to 95° F.—and the mineral salts which they contain vary from two grammes to five and a half grammes per litre. The other diseases which the author claims to be able to relieve or to cure by the use of Royat waters internally and externally are neurasthenia, gouty neuralgias, chronic laryngitis, and the various disorders likely to occur at the menopause. In addition to these are endometritis and the consequent sterility. No records of cases or other references are given.

*Records from General Practice.* Part II. By J. KINGSTON BARTON, M.R.C.P. Lond., M.R.C.S. Eng., J.P. London: John Bale, Sons, and Danielsson. 1901. Pp. 208. Price 2*s.* 6*d.*—We reviewed the first instalment of Mr. Barton's "Records" in our issue of June 30th, 1900, p. 1889. This, the second number, contains amongst other papers details of 100 cases of midwifery. In those which cover a period of time from June, 1897, to June, 1898, there were no maternal deaths and there was but one death of the child, due to craniotomy. The patient was a primipara, aged 38 years, with a narrow pelvis. During labour she developed acute cardiac dilatation. Dr. W. S. A. Griffith attempted delivery with forceps but failed. Owing to the critical condition of the mother craniotomy was decided upon and delivery was successfully performed. The mother made a good recovery and the action of the heart quickly became normal. Of other papers, those on Drugs and Remedies and the Notes on Urine contain many useful observations.

*Mentone as a Health and Pleasure Resort.* By D. W. SAMWAYS, M.D. Camb. and Paris. Illustrated by reproductions of numerous photographs. London: Bemrose and Sons, Limited. 1901. Pp. 104. Price 3*s.* 6*d.*—This is a small pocket guide with an excellent photograph on almost every other page. If for no better reason than these numerous illustrations, it constitutes a capital little souvenir of the picturesque winter station. But there is also a sufficiency of descriptive matter. There is even a brief historical sketch of Mentone extending to the middle ages and describing the various changes that have taken place, including its rebellion from the princely dominion of Monaco and the formation of an independent republic. Of course, such questions as that of the climate are treated at much greater length, for it is the climate which is the main, if not the sole, attraction to Mentone. In this respect the photographs serve better than the text to show how thoroughly Mentone is sheltered from the cold winds and exposed to the hot southern sun. The climate is also vindicated by the vegetation, the orange and the lemon trees, the aloe, the prickly pear, and the violets that appear early in January. The clearness of the atmosphere is proved by the fact that the mountains of Corsica, though 100 miles away, may often be seen across the sea. The advantages which Mentone affords for the climatic treatment of disease are naturally discussed at considerable length and we find that "on the whole phthisical patients are far from being now the bulk of Mentone invalids," but that "half the English doctors who have practised in Mentone came to save

their lives and but one has failed." Bronchitis, emphysema, catarrhal conditions generally, cardiac weakness, asthma that is not due to nervous conditions, laryngitis, and renal diseases are all favourably influenced by the climate of Mentone. Dr. Samways also describes the drives, excursions, and diversions generally that visitors may enjoy when wintering at Mentone and has practical advice to give in regard to the hotels, furnished villas, &c. The book will therefore be of use to those who propose to winter at this particular spot.

## JOURNALS AND MAGAZINES.

*American Medicine.* Vol. I., Nos. 1 and 2.—This is a new medical journal and is, as we learn from the title-page, "founded, owned, and controlled by the medical profession of America." Among the writers of original articles we see such well-known practitioners as Osler of Baltimore, Hare of Philadelphia, and Deaver of Philadelphia. The type is good, the paper is good, and the editorial comment, as might be expected from such an editor as Dr. G. M. Gould, is bright, pithy, and interesting. A feature of the journal is the "World's Latest Literature," which is a well-selected *résumé* of medical literature from other journals. We were pleased to see in the prospectus affixed to No. 1 that "the reading columns will not be dominated or influenced by commercial considerations. Not a 'reading notice' will ever appear if watchfulness can prevent. Any attempt to bribe or intimidate editorial action—and such attempts, positive or negative, are common—will fail." It was with some surprise, therefore, that we saw at the end of the journal three pages given up to a record of the use of two drugs in certain diseases, exemplified by reports of cases and illustrated with temperature charts. For these articles, which at first sight appear to be original articles, are in fact mere reprints from back numbers of other medical journals and are advertisements pure and simple, only printed to look as if they were not so. The list of founders and subscribers to the new journal includes some of the most honoured names in American medicine. It is therefore to be hoped that the advertisements will not appear again in the objectionable form to which we have referred. They are still in evidence in No. 2 and are in this number even more like "reading matter" than in No. 1, for in that number they were divided from the journal proper by a list of subscribers. But we are confident that this little incongruity has escaped the eye of the editor and will promptly be set right. Dr. Gould, if only by reason of his wonderful "Illustrated Dictionary of Medicine, Biology, and Allied Sciences," is entitled to the gratitude of every English-speaking medical editor, and we cordially wish him success in his new venture.

The *Practitioner* continues in the May number its consideration of organo-therapy. Dr. W. E. Dixon contributes a commendably concise yet interesting article on the Composition and Action of Orchitic Extract. He concludes that injections of this extract as administered by Brown-Séquard have a powerful influence in metabolism and on blood-pressure. The metabolic effects are shown by changes in the blood and urine. Dr. Dixon also discusses the ovary as an organ of internal secretion. A case of transplantation of an ovary from one woman to another is quoted. Dr. W. Bulloch summarises recent work on the nature of cytotoxins. Dr. C. R. Box writes on the value of suprarenal preparations in Addison's disease, discussing two cases very carefully observed over considerable periods of time. There is very little evidence as yet of benefit in Addison's disease from suprarenal extract. An article on the recent work of some French authors deals with their conclusions as to the therapeutic value of extracts from various organs. Some remarkable effects are quoted, particularly as regards liver extracts used in cases of diabetes and intestinal extracts in cases of obstruction of the bowels. The hero of medicine for the month is Brown-Séquard whose restless and effective life is succinctly told. The editorial remarks deal mainly with the question of army medical reform. The affairs of the National Hospital for the Paralysed and Epileptic, Queen-square, W.C., are also discussed, and Mr. Burford-Rawlings is very justifiably castigated. Dr. Arthur Newsholme writes on ventilation of schools, and there are, as usual, good summaries of recent work in one or two departments of medicine.

The *Medical Magazine* is not very interesting in its May issue. Mr. J. Foster Palmer allows the account of modern epidemics to lead him from the consideration of cholera to the investigation of infinity. We want more physics and less metaphysics in such articles. Mr. A. R. Whiteway upholds the Elmira method of treating criminals. Dr. Thomas Oliver writes on health in the school and some good advice as to ventilation and spread of infection in schools is to be found in his article.

# Analytical Records
FROM
# THE LANCET LABORATORY.

## PLASMON COCOA.

("INTERNATIONAL PLASMON," LIMITED, 56, DUKE-STREET, GROSVENOR SQUARE, LONDON, W.)

PLASMON cocoa is typical of the undoubted advantages that may be gained by the addition of plasmon to a common article of diet. Plasmon increases the food value of cocoa enormously, more than half of the resulting mixture consisting of pure and soluble proteid. Raw cocoa is, of course, unsuitable dietetically chiefly because of the large proportion of indigestible fat which it contains. In the best cocoas this fat is reduced to about 30 per cent. from an initial quantity of 50 per cent. The proteid value of cocoa is, however, small, for out of a total amount of 20·85 per cent. only 6·4 per cent., according to a recent analysis which we have made, is soluble. Some of the nitrogen of cocoa occurs in the interesting alkaloid, theobromine, an ally of caffeine, in tea, and in coffee, the amount of theobromine being nearly 2 per cent. Though cocoa is to some extent nutritive, yet its value as an article of diet is chiefly due to its stimulant properties, and its freedom from irritating substances has made it a satisfactory substitute for coffee and tea where these cannot be tolerated. With milk and sugar cocoa forms an excellent beverage and one which presents the composition of a food in accordance with physiological requirements. The remarkable nutritive power of plasmon has been well-established, and, as we have already pointed out, plasmon may be used with the greatest possible advantage to enrich food otherwise poor in nitrogen or proteid. Plasmon cocoa contains all the constituents able to support life. It is mildly stimulating whilst highly nourishing. Our analysis was as follows: moisture, 10·82 per cent.; mineral matter, 7·50 per cent.; proteids, 57·51 per cent.; fat, 10·20 per cent.; and starch and insoluble matters, 13·97 per cent. Further analysis leads to the satisfactory result that as much as 92 per cent. of the total proteid of plasmon cocoa is in a soluble state. The cocoa used in plasmon is of excellent quality, possessing the well-known cocoa flavour and aroma to a marked degree whilst containing a minimum of fat—namely, 29·10 per cent. Since plasmon contains at most only a trace of fat, the fat present in plasmon cocoa is wholly derived from the cocoa mixed with it. These figures would accordingly show that plasmon cocoa contains 35·43 per cent. of cocoa and

64·57 per cent. of plasmon. There are many substances mixed with cocoa to which exception may be taken, but the admixture of a soluble proteid which is a rapidly assimilable food is a physiologically correct proceeding, making cocoa a very nourishing article, an advantage which in its natural state it lacks. The addition of plasmon to cocoa, moreover, whilst not detracting from the dietetic properties which it possesses, reduces the fat to a more easily digestible quantity. Plasmon cocoa is an important and valuable adjunct to the every-day dietary and offers an advantage in special dietetics also.

(1) HEROIN PREPARATIONS; AND (2) ELIXIR OF IRON AND MANGANESE PEPTONATES WITH AND WITHOUT CREASOTE.

(SCHIEFFELIN AND CO., NEW YORK. LONDON AGENCY: POTTER AND SACKER, 7, FOWKES-BUILDINGS, GREAT TOWER-STREET, E.C.)

We have received a very interesting and elegant series of preparations containing heroin which has been used favourably in the place of morphia as a sedative, particularly in respiratory affections. "Elixir eupnein" contains per fluid ounce one-sixth grain of heroin with eight grains of terpin hydrate and 20 grains of creasote. This preparation has been used in the treatment of pulmonary tuberculosis, chronic bronchitis, and other chronic affections of the lungs. "Elixir heroterpin" contains the same ingredients except the creasote. The combination appears to be valuable in bronchitis and asthma. "Syrup herophosphites," besides containing the hypophosphites of iron, manganese, lime, quinine, strychnine, &c., contains also per fluid ounce four-thirtieths of a grain of heroin. The same preparation may be had free from sugar. The soothing effect of heroin is said to be attended with distinct advantage in this combination. Lastly the preparation known as "Elixir of Iron and Manganese Peptonates with Arsenic" is worthy of mention. Each fluid ounce contains the so-called peptonates of iron and manganese in the quantities of 34 grains of the former and 8½ grains of the latter and one-thirtieth of a grain of arsenious acid. The "Elixir creoferrate" contains in each fluid ounce the same quantities of the peptonates and two grains of creasote, but the arsenic is omitted. This preparation is intended for the treatment of chronic affections of the respiratory organs attended with anæmia. The creasote serves to arrest fermentative dyspepsia.

(1) PEPTO-IODO-EIGON; AND (2) PEPTO-BROM-EIGON.

(THE HELFENBERG CHEMICAL WORKS CO., LONDON AGENCY, MESSRS. BUCHNER, SCHACHT, AND CO., 55, FORE-STREET, LONDON, E.C.)

The iodo- and brom-eigons are albuminous compounds of iodine and bromine respectively. Soluble modifications of these compounds are formed by associating them with peptones. As much as 15 per cent. of iodine is contained in pepto-iodo-eigon and 11 per cent. of bromine in pepto-brom-eigon; both compounds are easily soluble in water, the solution possessing a meat-like flavour with somewhat bitter and inky aftertaste. The preparations are fine amorphous light brown powders. The peptone reaction is characteristic of each. The halogen can be expelled by heating with nitro-hydrochloric acid. The comparatively large quantity of iodine and bromine respectively contained in these organic combinations is remarkable. They are intended for the administration of iodine and bromine where the ordinary mineral iodides and bromides are badly borne. It is said that no irritation of the mucous membrane or other unpleasant symptom is set up after the administration of pepto-iodo-eigon, as is sometimes the case with potassium iodide, while the pepto-brom-eigon produces no ill-effects as do the ordinary bromides at times, such as giddiness or skin eruptions, even when administered continuously and in large doses. The iodine preparation has been employed in gynæcological practice and in syphilis. These curious halogen albumin derivatives are of great interest both from a chemical and therapeutical standpoint.

CAMBRIDGE LEMONADE.

(CHIVERS AND SONS, HISTON, CAMBRIDGE.)

We have carefully examined this preparation for the common impurities of its kind, but without a positive result. The materials are pure and wholesome, being obtained, as it is stated, from selected lemons. The preparation has the appearance of brown sugar which dissolves easily in water, producing a yellow opalescent liquid (an opalescence due to lemon oil) similar to lemon squash. It possesses the pleasant aroma and acid taste of the fresh-cut lemon and affords a refreshing and agreeable summer beverage.

PROTENE DIABETIC BRAN BREAD.

(THE PROTENE CO., LIMITED, 35, WELBECK-STREET, CAVENDISH-SQUARE, LONDON, W.)

This is a brown loaf of good uniform texture and indifferent flavour. Our analysis gave the following results: moisture, 38·60 per cent.; mineral matter, 4·70 per cent.; proteids, 25·09 per cent.; fat, 11·25 per cent.; and non-nitrogenous matter, including starch, 20·36 per cent. The bread, as will be seen, contains an excellent proportion of proteid representing the separated casein of milk. It is not, however, free from starch but contains a minimal proportion. The fat occurs also in notable amount, over 10 per cent. The bread is regarded as useful for the relief of constipation owing to its branny constituents.

## ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN extraordinary meeting of the Comitia was held on May 9th, Sir WILLIAM SELBY CHURCH, the President, being in the chair.

The following Members were admitted as Fellows of the College: William Burns Beatson, M.D. St. And. (Eastbourne); Arthur Hamilton Nicholson Lewers, M.D. Lond.; John Walter Carr, M.D. Lond.; Edmund Hobhouse, M.D. Oxon. (Brighton); William Rivers Pollock, M.B. Cantab.; Hugh Walsham, M.B. Cantab.; Walter Sydney Lazarus-Barlow, M.D. Cantab.; Edmond Fauriel Trevelyan, M.D. Lond. (Leeds); John Hannah Drysdale, M.D. Cantab.; Frederick Eustace Batten, M.D. Cantab.; Raymond Henry Payne Crawfurd, M.D. Lond.; and George Frederic Still, M.D. Cantab. The admission of Dr. W. J. Tyson was unavoidably postponed.

Dr. Norman Moore was elected by a large majority as the Representative of the College on the General Council of Medical Education and Registration for a term of five years from May 14th, 1901.

On the motion of Dr. NORMAN MOORE, seconded by Dr. JAMES TAYLOR, a report from the Committee of Management on a letter, dated Dec. 12th last, from the General Medical Council, inclosing a resolution of the Council with respect to the registration of medical students, was fully considered, and it was adopted by a very large majority. The following Fellows took part in the discussion: Dr. D. MACALISTER, Dr. P. H. PYE-SMITH, Sir R. DOUGLAS POWELL, Dr. P. W. LATHAM, and Dr. J. F. PAYNE.

The PRESIDENT announced that the following Fellows had been appointed to serve on a joint committee of the two Colleges to consider the position of the Colleges in relation to the newly organised University of London: the President, Dr. Pye-Smith, Dr. W. H. Allchin, Dr. J. Kingston Fowler, and Dr. Norman Moore.

Dr. THEODORE WILLIAMS was appointed as the delegate of the College to the British Congress on Tuberculosis to be held in London from July 22nd to the 26th inclusive.

Permission was granted to Mr. Rischgitz to take photographs of the portraits of the Munro family in possession of the College.

The report from a special meeting of the Censors' Board, held on April 29th, recommending that the diploma of a Licentiate should be suspended for two years, was received and adopted.

THE LANCET.

*LONDON: SATURDAY, MAY 18, 1901.*

## The General Medical Council and the Royal Colleges of Physicians of London and Surgeons of England: a Deplorable Impasse.

THE five years' curriculum of medical study, which has now been in operation for about nine years, has been the source of unexpected controversy between three of the leading bodies connected with medical education. The dispute in question is only of about 18 months' standing, but it appears likely to result in a deadlock since neither of the disputants seems inclined to yield, and if it should continue the system of registration of students by the General Medical Council will be imperilled. When the extension of the curriculum was adopted it was with the hope that more time would be afforded to the student for the clinical and practical part of his work. We are far from saying that something has not been gained in this direction, but at the same time it is notorious that the chief use made of that additional year has been to utilise it for the earlier part of (so-called) medical studies, for work which is not strictly speaking medical but scientific; and the whole trouble has arisen from the refusal of the two Royal Colleges of Physicians of London and Surgeons of England to be bound by the General Medical Council in their selection of institutions where these preliminary studies may be carried on. For the General Medical Council requires that "no medical student shall be registered until he has passed a preliminary examination as required by the General Medical Council, and has produced evidence that he has commenced his medical studies at a university or school of medicine, or at a scientific institution recognised by one of the licensing bodies and *approved by the Council*." It is around the claim represented by the words which we have italicised that the whole controversy is centred.

As in most disputes between reasonable persons there is something to be said on both sides. The General Medical Council, composed as it is largely of representatives of the medical corporations and universities of the United Kingdom, including those of the two recalcitrants, is no doubt keenly desirous of maintaining a high level of education all round. Its requirements as regards the preliminary examination in arts of intending medical students are by no means excessive; many people think they are not stringent enough. But they have been accepted by licensing bodies as adequate, and none of these bodies, except the universities, show any desire to establish examinations in these extra-curricular subjects. The next stage in the student's career is the one where the difficulties arise. He is supposed to commence his medical studies when he is really entering upon a course of physical and natural science such as he can often acquire at the school whence he matriculated, as well as at many an institute of science which has no reference to the career which he is assumed to have already entered upon. The General Medical Council having imposed a five-years' curriculum from the commencement of medical studies cannot ignore this period of the youth's career, and with a solicitude which testifies to its desire for a common standard declines to recognise him as a medical student at all unless he has pursued these scientific studies at a place of which the Council approves. Now, the Council does not apparently approve of all the institutions which after investigation have been accepted as suitable places of study by the two Royal Colleges in question; and the latter, who are just as anxious as the former body to maintain a high standard of education, resent the supervision of their choice by the Council. It seems a small matter, but from the point of view of the Colleges it does involve a principle for which they are perhaps scarcely to be blamed for striving to maintain, except in so far as they may be setting a bad example in opposing constituted authority. No one can say that the Colleges are not just as competent to recognise good from bad schools as is the General Medical Council; they have within their bodies some of the most prominent and experienced medical teachers in the country, whilst their diplomas are deservedly recognised as of high value. The principle at stake in their view is one which is common to all corporations and universities—namely, the right to frame their own regulations of study required from candidates for their diplomas and degrees. And so long as instruction in these preliminary scientific subjects is considered as part of medical education, every medical licensing body technically has the right, if it chooses to exercise it, of determining from what scientific institutions it shall receive certificates.

Until this country has a State diploma-granting body it is hopeless to expect equalisation in the value of diplomas, and regrettable as it may be for individual corporations to take their own line in these matters we fail to see how it can be avoided under present circumstances. We trust, however, that an amicable settlement of this particular matter will be arrived at between the Colleges and the Council. There ought to be a way out of the *impasse*. The General Medical Council, for instance, might "gracefully concede" its approval of all scientific institutions selected by the Royal Colleges, or it might boldly declare that these subjects are no longer to be considered part of the medical course and place them on their proper footing of "preliminary education." In that case we conceive that corporations will hardly dispute the right of the Council to make its own regulations and requirements for a preliminary scientific examination to be passed not earlier than 12 months from the date of the preliminary examination in arts. This may seem to some educational authorities, especially those who feel that medical education in this country is not scientific enough, to be a retrograde step. But it is only in accordance with the tendency of the age, and for our part we do not think that many medical schools will be sorry to be relieved of the burden of teaching elementary science that they may be enabled to devote their

energies to the sciences as applied to medicine. After all it will only be doing what the University of London has done for half a century, only the University does not even care where its candidates pick up their science so long as they can pass the preliminary scientific examination. It is true that the University enforces its right of testing the candidate's knowledge by its own examinations, whereas the Colleges and other corporations accept the tests of other bodies as evidence of sufficient knowledge. But if it were recognised by the Council as a purely preliminary study there is no reason that we can see why the selection of the test sufficient to qualify for registration should not be given over to that body just as is now practically done in the case of the earlier arts education. We make the suggestion in all seriousness and trust that it will not be deemed unworthy of consideration by the General Medical Council and the bodies represented thereon.

## Coincident Typhoid and Malarial Infection.

SINCE WOODWARD in 1863 introduced the term "typho-malarial fever" there has been a long-waged controversy in medical literature on the question of the existence of such a disease and its nature. In the Johns Hopkins Hospital Reports, vol. viii., 1900, is a very interesting contribution by Dr. J. P. LYON of Buffalo on the subject, but the author prefers to discuss the matter by considering the coexistence of typhoid and malarial infection in the same subject, and the clinical picture resulting from such a combined infection rather than to adopt the term to which we have referred—"typho-malarial fever." He points out that so long as the exact cause and nature of both typhoid fever and malarial fever were unknown it was not a matter of surprise that little headway was made toward solving this problem. But as the cause and nature of these diseases have been established by scientific demonstration investigators are more in a position to settle the controversy.

Dr. LYON has carefully collected from literature 29 cases which have been thoroughly investigated, and he adds a case that was under his own care in the Johns Hopkins Hospital. He likewise discusses the various views which have been brought forward in favour of the term "typho-malarial fever," a term employed by WOODWARD, a surgeon in the United States Army, to describe cases of fever which presented a clinical picture neither of typhoid fever nor of malarial fever, but apparently a compound of both. In 1876 the same observer read another paper at the meeting of the International Medical Congress in Philadelphia, in which he maintained that "typho-malarial fever is not a specific or distinct type of disease, but the term may be conveniently applied to the compound forms of fever which result from the combined influence of the causes of the malarious fevers and of typhoid fever." Dr. LYON therefore examines his series of 30 cases to extract from them what evidence they offer on the subject of the so-called "typho-malarial fever" and on the question of the relative frequency of the combined infection. The descriptions of the clinical aspects have hitherto been supplied mainly by American and French observers, and a marked difference is found between them. For instance, American physicians maintain that rose-spots seldom develop; that the course of the fever is shorter and markedly milder than that of typhoid fever; and that the prognosis is consequently highly favourable and the mortality is very low. On the other hand, most of the French writers state that the course of the disease is usually severe and the mortality high; that complications are common; and that rose-spots usually appear. Dr. LYON concludes that, as a rule, the course of the disease is of at least average severity as compared with typhoid fever, and generally of greatly increased severity. The mortality in his series was high—in fact, it was about double that of typhoid fever, basing the statistics of typhoid fever on a large number of cases collected through a long period of years from different climates and regions of the world. With regard to the clinical picture no uniformity was found. The typhoid picture, however, was always present and in nearly all of the cases dominated the scene. The malarial manifestations appeared at different points in the different cases. Repeated paroxysms of chill, fever, and sweating at the onset of the disease appeared in many of the cases; in others these features were absent. Occasionally febrile paroxysms occurred during the height of the disease and irregularly through its course, though this was the exception. In most cases the malarial paroxysms occurred only in the convalescence from the typhoid fever. It is interesting to note also that in several cases malarial paroxysms directly preceded or accompanied the onset of the typhoid fever, disappeared completely during its course, and again reappeared during convalescence. This would seem to indicate, as BACCELLI, LAVERAN, and others have suggested, that the typhoid fever is the more masterful disease, and to illustrate the truth of the old adage, "De duobus morbis corpus unum obsidentibus potior alterum obscurat." Dr. LYON points out, however, that the important fact must not be forgotten in this connexion that quinine was freely used against the malarial element whenever it appeared, and in all probability, in some cases at least, completely changed the clinical picture that would otherwise have been manifested. He is convinced that had the malarial involvement been left untreated to pursue its own course the composite clinical picture would have been occasionally very different from what it actually was after quinine had removed the malarial participation in the course of the disease.

The series of cases studied by Dr. LYON strongly supports the observations of the French writers who have described a "typho-malarial fever," and he believes that this fever is a true coincident typhoid and malarial infection; but the "typho-malarial fever" described by the American writers as being so prevalent in the United States, and especially in the Southern States, is not, he says, as a rule, a true combination of typhoid fever and malarial disease. The important point of difference clinically between the "typho-malarial fever" of American and French physicians is found in the severity and mortality of the disease. The statistics of the United States army during the Civil War show the mortality from "typho-malarial fever" to have been less than one-fourth of the mortality due to simple typhoid fever. Dr. LYON is therefore quite

justified in concluding that the "typho-malarial fever" reported during the Civil War was not true combined typhoid and malarial fever, but either, and usually very mild, typhoid fever or continued malarial fever. Dr. LYON'S remarks are well worthy of careful perusal. He selected his cases with great care; they were all proved to be cases of combined typhoid fever and malarial infection by the existence of the parasites of malarial disease in the blood and by strong evidence, clinical, pathological, and bacteriological, of true typhoid fever. All the more recent investigations go to show, then, that the term "typho-malarial fever" to express a distinct disease should be dropped; and the fact that the combined infection does exist fully explains those cases of typhoid fever with a high mortality and abnormal temperature chart which are met with in regions where the malarial poison is rampant.

## The Etiology of Cancer.

IN the May number of the *American Journal of the Medical Sciences* appears a very important paper by Dr. HARVEY R. GAYLORD on the Protozoon of Cancer. It is now many years since the idea first arose that malignant disease might be caused by the local action of some micro-organism. Most of the earlier observations did not lead to any definite result. Nearly all the attempts at cultures were unsuccessful, but in 1887 SCHEUERLEN described a special bacillus, and KUBASOFF claimed to have produced secondary growths after the injection of a bacillus which had been obtained from a case of carcinoma. As these results were not confirmed by other observers it was concluded that these organisms were due to accidental contamination and that they were in no way connected etiologically with the malignant disease. The opponents, moreover, of a microbic origin of cancer were very emphatic as to the unlikelihood of any organism being the cause of carcinoma, and they claimed that no theory could be formulated which would account satisfactorily for all the phenomena of the occurrence and the progress of malignant disease. They explained, to their own satisfaction at least, all the facts connected with cancer by ascribing them to alterations in the nutrition of the organs involved or to a loss of the control of the nervous system.

Although many of these explanations were specious, it was felt by other observers that a microbic cause would better serve to account for the mode of occurrence and growth of the disease. Without laying too much stress on "cancer houses" and similar phenomena, pathologists recognised that the geographical distribution of cancer was in itself sufficient to discredit the idea of a nervous etiology, and the suggestion that the cause of the disease might be microbic, and yet that the organism might not belong to the class of bacteria, served to stimulate speculation and investigation. Histological observations showed within many of the cells of new growths various abnormal appearances which were explained by the supporters of the microbic origin of the disease as due to the presence of organisms, while their opponents as firmly held that they were nothing but degenerated cells. Most of those who acknowledged the parasitic nature of these cell inclusions were inclined to refer them to a branch of the protozoa—namely, the sporozoa or psorosperms, as they are frequently called. The coccidium was the genus to which the supposed micro-organism of carcinoma was ascribed, and, indeed, the coccidium is parasitic in many animals, and in rabbits does produce tumours in the liver, but these tumours bear no resemblance to carcinomata. Psorosperms have definitely been found in Paget's disease of the nipple, and this disease invariably leads to cancer of the breast if allowed to continue unchecked; or, rather, it may be looked upon as malignant from the commencement. All observers, however, have not agreed in considering these special hyaline bodies to be members of the class of protozoa, for there has been on the part of many a disposition to look upon them as yeasts. In 1890 RUSSELL described some spherical bodies in cancerous growths which were best demonstrated by the aid of fuchsin, and so he gave them the name of "fuchsin bodies." He considered that they belonged to the yeast group. In 1898 SANFELICE of Sardinia published a series of articles which went to prove that the parasitic inclusions found in cancer were identical in appearance with yeast organisms which had been injected into the tissues of animals, and he described some tumours which he had produced by inoculation with a yeast. One yeast which SANFELICE obtained from the skin of a lemon produced granulomata when injected into animals, and after the organism had been passed through several dogs its virulence had much increased, and when this yeast was injected into the breast of a dog it was followed after some months by the appearance of a true carcinoma. SANFELICE, however, was unable to obtain cultures of the organism from this growth.

In 1899 an article by PLIMMER appeared which described a new method of staining for showing these cell inclusions, and by this method he was able to demonstrate conclusively many facts in connexion with these bodies. His statements were based on the examination of 1278 specimens of cancer, and in 1130 of these he found the bodies which he considered to be parasites. In one instance PLIMMER was able to obtain a culture from a cancer; it was from a rapidly-growing carcinoma of the breast and it proved to be a yeast. Several other observers have also claimed to have found yeasts in cases of carcinoma. This represented the state of our knowledge when GAYLORD took up the investigation of the subject in the New York State Pathological Laboratory. The first portion of the work was a systematic investigation as to whether PLIMMER'S bodies occur invariably in all malignant growths, and it was found that in all the cases of carcinoma which were examined PLIMMER'S bodies were uniformly present. In all these tumours RUSSELL'S fuchsin bodies were also seen in large numbers. In attempting to determine the nature of PLIMMER'S bodies it soon became evident that many observers have described these structures. The variations which occur in the illustrations depend probably on the different methods of hardening and staining employed by the different investigators. So it is obvious that PLIMMER'S bodies are not new structures, but his hardening and staining methods give them a more uniform appearance and apparently enable them to be recognised in some cases where the ordinary methods give no results. GAYLORD was unable to demonstrate the identity between PLIMMER'S

bodies and transformed yeast organisms, and he concluded that they are not yeast cells. In a case of carcinoma of the abdomen GAYLORD found in the peritoneal fluid a number of minute, homogeneous, pale spherical bodies which were at first taken for droplets of fat, but it was soon seen that their refractive index was too low for fat. They were also unaffected by ether and by solution of potash, and did not stain black with osmic acid. Some of these bodies were injected into the jugular vein of a guinea-pig and when the animal was killed a month later a carcinoma of the lung was found. The first attempts at cultivating these organisms were not successful, but later better success was obtained, and it was found possible in many cases to cultivate them directly from cancerous growths and from fluids in contact with cancer. The development of the organisms was watched and they were seen to throw out pseudopodia, to develop a nucleus, and to become spore-sacs. These bodies are those described by PLIMMER and are best differentiated by his method of staining. It was further found that RUSSELL'S fuchsin bodies were the smaller spheres which were more resistant to fixatives. GAYLORD is satisfied that the organism is a protozoon and not a yeast.

We have been able to give but a very brief account of these recent investigations, but the care and skill with which the researches have been carried out must be apparent to all who read Dr. GAYLORD'S interesting paper, and though it would be premature to express any decided opinion until the investigations have been confirmed by other observers, yet the results are very probable and serve to explain and to reconcile many observations which were apparently inconsistent. Should they be confirmed, a very decided step will have been taken in the pathology of malignant diseases, and though a knowledge of the etiology of a malady is very far from being a knowledge of its cure, yet we may reasonably hope that a full acquaintance with the mode of causation of cancer will assist us greatly in preventing the occurrence of the disease.

# Annotations.

"Ne quid nimis."

## LUXURY IN DIET.

IT is a well-known fallacy that eating is necessarily feeding, but there is no doubt that many individuals eat an average daily amount of food far in excess of what is really required in order to sustain the vital processes. That being so, the waste of food is very great, for the digestive organs are not able to deal with, or to appropriate, the large quantity of food which a person is tempted by his appetite to take. This is one aspect of the question of economy in food which deserves consideration, and undoubtedly if more attention were given to the rational relationship of appetite to the needs of the system we should be all the better for it. But there is another aspect of the question equally worth considering, and that is in connexion with luxurious foods. Of course, the wealthy man pays a good deal more for his breakfast, luncheon, and dinner than does the poor man, but is Dives physiologically and physically speaking any better for it? We doubt it. Plain food is, on the whole, more acceptable to the economy than are rich morsels. It is very questionable whether from the strictly nutritive point of view champagne and oysters are after all in health an advance upon ginger-beer and cockles, whether turtle is preferable to calf's head, or caviare to soft herring roe, or plovers' eggs superior to the ordinary eggs of the barndoor bird. But there is a vast difference between the price of champagne, say at 10*s.* a bottle, and ginger-beer at a penny a bottle, and between oysters at 3*s.* 6*d.* a dozen and cockles at 50 for a penny, and between turtle soup at 10*s.* 6*d.* a pint and calf's head soup at 6*d.* a plateful. We shall be pretty correct in stating that the man who buys common eggs instead of plovers' eggs, and calf's head instead of turtle, and a pigeon instead of a partridge, is the gainer, at any rate from the economically nutritive point of view. In other words, the price of an article of food by no means sets upon it its food value and the difference represented between the price of champagne and ginger-beer, between that of oysters and cockles, &c., is the price paid for pleasing the palate, which extravagance is probably the penalty of a mental rather than of a bodily demand. But physiologically it is akin to substituting diamonds for coals in the steam-engine. Luxurious foods are, strictly speaking, creature comforts, while plain foods are bodily necessities. It must be admitted, however, that, as a rule, choice-tasting game and meats are necessarily tender and therefore easy of assimilation. But clearly there must be a limit to the appropriation of food by the body, and this limit may be reached just as easily by means of good, plain, and tender food as by food of a rarer sort. According to this view there must be great physiological extravagance going on from day to day. In the matter of beverages the same sort of extravagance occurs. Enormous prices are given for a particularly choice wine, but here, again, it is practically certain that the human economy gains little or nothing by it. Does the man who drinks a claret of choice vintage at, say, 10*s.* a bottle obtain any material advantage over the man who drinks his shilling bottle of *vin ordinaire*? It is doubtful. In any case, the prices asked for wine at big hotels are so monstrously high and the wine offered is so often bad that this fact alone accounts for an increasing demand for whisky as a dinner beverage. There are obviously considerable physiological sin and wantonness committed in the choice of food and in the quantity consumed.

## THE METROPOLITAN WATER-SUPPLY.

THE Water Examiner to the Local Government Board has issued his report on the condition of the metropolitan water-supply during the month of March. The Thames water was coloured and turbid during the first 12 days of the month, and from the 1st to the 8th of the month the engineer of the Chelsea Company closed the intake from the river. According to the statement which he has supplied the Thames water was of "indifferent" character on the 1st of the month and "bad" from the 2nd to the 8th, both days inclusive. It is very much to be regretted that Dr. T. E. Thorpe, the chemist appointed by the Local Government Board to examine the quality of the London water-supply, did not make a full analysis of the water supplied by each company during the period in which the river was in flood and the water was turbid. The East London Water Company has no subsidence reservoirs for its Thames supply, and at the period when the water was considered by the Chelsea Company's officer to be so bad that it should not be taken at all the East London Company was presumably taking similar water and pumping it directly to its filter-beds at Hanworth. If this was in fact done it would have been interesting to learn what the quality of the water supplied from the Hanworth filter-beds actually was. Dr. Thorpe's

full analysis of one specimen of the water of each company was made on March 18th, and the specimen taken of the East London Company's water came from a cab-rank in Shoreditch. It is not too much to say that the quality of the water filtered at Hanworth on March 2nd is not to be gauged by the quality of the water supplied at a Shoreditch cab-rank on the 18th of the same month. The average daily amount of water supplied by the metropolitan companies was 195,914,944 gallons which it is estimated represents a daily consumption of 31·63 gallons per head. The average daily amount per head supplied by the Chelsea Company was slightly more than that given in the corresponding month of the year 1900, but in the case of all the other companies the daily supply per head was less than it was in that year. During the month under review the number of new supplies given by the water companies was 2045, but no information is given in the report as to the districts in which this extension has taken place. Although all the water companies are under a statutory obligation to give constant service to all their customers, this duty is still flagrantly neglected and the report shows that the Lambeth Company gives a constant supply in only 76·3 per cent. of the total number of its supplies. This company is privileged to exact a higher water rental than is permitted in the case of any other metropolitan company. According to the analysis of Dr. Thorpe the Grand Junction Company has supplied water containing the highest proportion of organic carbon. The same company has supplied also the dirtiest water, or, to adopt the polite euphemism of the Water Examiner, that containing "the deepest average tint of brown." The report states that the average rate of filtration per square foot per hour adopted by the company was 1·12, this rate being more rapid than that in use by any of the other companies. The reservoir capacity of the Grand Junction Company is undoubtedly another cause of the unsatisfactory quality of the water supplied. In the case of the Grand Junction Company the reservoirs for the storage of unfiltered water are sufficient only to contain an amount equal to 2·9 days' supply, whilst the West Middlesex Company has storage capacity sufficient for 16·7 days' supply.

## GERMAN SCIENTIFIC AND MEDICAL LITERATURE IN THE EIGHTEENTH CENTURY.

THE *Frankfurter Zeitung* in a recent issue publishes an elaborate and, from the point of view of the historian, a well-studied account concerning literary publications in Germany during the eighteenth and the last century, and we note with satisfaction that special prominence is given throughout by the writer of this highly interesting and instructive composition to medical and scientific literature. Without entering into any special details it deserves to be pointed out that during the eighteenth century the increase in the output of books was more or less gradual and reached its acme in the years immediately preceding the French Revolution. The year 1786, however, stands out as by far the most prolific both as regards the publication of books in general and especially the inauguration of the use of the more comprehensive scientific treatises commonly called "Handbücher." In that year the number of books published amounted on the whole to several thousands; of these there were: purely medical, 275; scientific (chemistry and physics), 182; political and physical geography, 147; and mathematics, 49. It is interesting to record that there were, in addition, some 135 journals already in existence; they were, it is stated, founded exclusively for the purpose of publication of matter of a purely literary and scientific character, and they are still to a considerable extent preserved in a good condition in the library attached to the University of Leipsic; moreover, we are informed that both a classified index and a subject catalogue are kept there separately to facilitate reference to this rather old fund of learning. In connexion with this statement it may be of interest to observe that Leipsic, which still has a world-wide reputation for great literary enterprise, was then almost the only publishing centre in Germany.

## THE BIRMINGHAM CONSULTATIVE INSTITUTION.

THE honorary secretary of the Birmingham Consultative Institution has published certain resolutions approved by his committee under which the institution guarantees (1) that in the future all advertisements will be avoided; (2) that none of the promoters will receive financial benefit from the operations save the medical staff; and (3) that only those patients will receive attention whose means warrant their recourse to the institution. In these circumstances applications for appointments are invited from the medical profession. We recommend our readers to wait before applying for these posts. The medical profession in Birmingham do not consider that a Consultative Institution is in the least required in their city and our opinion is the same. The consultant surgeons and physicians of Birmingham, men with hospital practices and other claims to large and special experience, have offered to see all cases which are introduced to them by medical men as deserving of the concession at greatly reduced fees, so that there is no necessity for an institution managed by laymen to meet the wants of those who in the opinion of laymen can afford to pay only low fees. The institution proposes to provide by an elaborate machinery facilities that have already been offered to the Birmingham public by the medical profession. We shall not be surprised if the medical profession of Birmingham receive with coldness their professional colleagues who accept posts under the lay managers of the Birmingham Consultative Institution.

## HEREDITY AND DENTAL DISEASE.

AT the last meeting of the Odontological Society of Great Britain a paper was read by Mr. Norman G. Bennett entitled Heredity and Dental Disease. As an introduction to the more special details connected with the teeth and jaws the author briefly reviewed some of the facts of inheritance and the theories which have been enunciated from time to time to account for such facts. The hypothesis of the continuity of the germplasm, so strenuously upheld by Weissmann, received particular attention on account of the importance of the corollary deducible from it which affirms the impossibility of characters acquired during the life of the individual being transmitted. Mr. Bennett remarked that a striking divergence of opinion existed on this point among the leading workers in the different fields of biology. He proceeded to trace the history of the human jaws so far as it is known, commencing by referring, for purposes of comparison, to the chief peculiarities of the simian type of jaw, and then describing the various interesting discoveries of human remains of palæolithic and neolithic periods, including jaws and teeth, which have been made at different times. A further comparison with the different types found among the lower races at the present day showed how gradual had been the diminution in the degree of prognathism and the dental suppression by which had been evolved the jaw found in the modern examples of the Aryan races. The explanations supposed to account for these changes were discussed, and while accepting as possible factors in the process such influences as sexual selection and the mixture of races Mr. Bennett argued that these were probably incapable of accounting for all the facts which presented themselves. He pointed out the difficulty of believing that disuse could have any effects on calcified tooth structure in causing a modification which might be perpetuated by inheritance, except on the supposition that diminished nutrition in the smaller jaw occasioned gradual abortion of the wisdom

tooth in the cramped space available for it. With regard to the jaw itself, the inherent probability of diminution owing to the accumulated inherited effects of disuse was greater. Mr. Bennett devoted considerable attention to the views expressed by Dr. J. Sim Wallace in some recent articles on the etiology of dental caries. He was unable to support Dr. Wallace's theories (1) that the size of the jaw was the direct expression of the size of the tongue and that the latter frequently did not attain its full development owing to the removal of the fibrous portions of the food-stuffs by civilised peoples; and (2) that the diminution in the size of teeth was occasioned by decreased liability to caries incident to these variations and the consequent survival of the individual. Mr. Bennett brought many arguments to bear in opposition to most of Dr. Wallace's contentions and went on to point out how the theory of "regression towards mediocrity" propounded by Galton and supported by Russel Wallace might be invoked to explain most of the facts of degeneration of the teeth and jaws without assuming as a fact the inheritance of acquired characters; but in concluding this part of his paper he expressed the view that a verdict of non-proven was the only possible one at present. The second part of the paper was concerned with the researches of Dr. Black on the strength, density, and percentage of lime-salts in human teeth, and Mr. Leon Williams's demonstrations of the earliest stages of dental caries and the bearing of these investigations on current views. Mr. Bennett deprecated the tendency of many odontologists to accept the inference that the variability of susceptibility to dental caries must of necessity be sought for outside the teeth themselves, and he showed that, even if Dr. Black's observations were accepted in their entirety, such a conclusion was not the logical outcome. While believing that the ever-varying condition of the oral fluids might be a most fruitful subject for investigation, yet he urged the view that there might be, and probably were, physical and molecular differences between teeth the chemical composition of which was shown to be as nearly as possible identical, and that associated with such differences there might be correlated a dissimilar degree of susceptibility to the micro-organisms of dental caries.

## REMARKABLE EXPLOSIONS AT MANCHESTER.

ON May 3rd a series of violent explosions took place in Sandal-street, Bradford-road, Manchester. The district contains a number of chemical works. An inquiry will no doubt be held as to the cause of the explosions, but it is said that "quantities of the noxious vapours generated in the processes carried on in some of these works find their way into the sewers, and it is to this cause that the explosion is at present attributed." A little before 3 P.M. the ironwork of the manhole at the foot of Sandal-street and the heavy stone setts surrounding it were suddenly blown into the air with a loud report. This was succeeded by a similar explosion at the next manhole, followed quickly by others, till all the manholes covering a distance of nearly 400 yards had been destroyed. In two adjoining thoroughfares manholes were blown up, "and in each case eye-witnesses state that the explosion was followed by a flame of considerable height." A very offensive odour accompanied the explosions. Although this part of the neighbourhood is thickly populated no one was hurt owing to the children being in school and their parents in the mills and works. The operations carried on at the various works are many and unsavoury. They include tar-distilling, the manufacture of sulphuric acid and sulphate of ammonia, benzol rectifying, the manufacture of paint and varnish, the treatment of gas products, oil-distilling, and other similar manufactures. The residents have often complained of nuisances. It is said that sulphuretted hydrogen has been found to be given off in the sewers. The inspectors have discovered, it is stated, that spent acid from benzol was being put into the sewers, which coming into contact with spent ammonia liquor gave rise to an evolution of sulphuretted hydrogen. In May, 1896, the medical officer of health, with an inspector, found a quantity of naphthalene in two of the manholes. Creasote has also got in from a tank having been allowed to run over. People have complained that the noxious vapours have got into their houses from the sewers, and on one occasion there was an explosion in a kitchen, when the flooring was torn up and much damage was done. The dwellers in this evil-smelling and dangerous neighbourhood look on this last exploit of the imprisoned gases as being perhaps a blessing in disguise, and hope that at last definite steps will be taken by the authorities "to remedy the dangerous conditions in which they live and of which they have long complained."

## THE FESTIVAL DINNER OF THE MEDICAL GRADUATES' COLLEGE AND POLYCLINIC.

ON Wednesday next, May 22nd, the festival dinner of the Medical Graduates' College and Polyclinic will be held at the Hotel Cecil. No pains have been spared to make the occasion a successful and even a remarkable one. Mr. A. J. Balfour in the chair will be supported by some 400 gentlemen interested in the welfare of the institution, and among the speakers will be the new Bishop of London, Sir William Broadbent (the President of the Polyclinic), Lord Strathcona, and the Duke of Marlborough. The efforts of these speakers will be openly directed towards obtaining for the Polyclinic a large sum of money and as the orators will have at the table with them some of the richest and most open-handed citizens of the empire we may feel confident that a substantial result will be obtained. The Polyclinic, as we have said on previous occasions, fills a gap in the medical education of this country. If it had a substantial endowment its uses as a central school for post-graduate students would be so immediately recognised that the students would themselves by their numbers supply the income necessary to carry on the work. That, at least, is our belief and that of the promoters. But in spite of the notable generosity of not a few lovers of science the institution has never been placed upon a substantial pecuniary basis. We should be glad if the festival dinner should prove a turning point in its fortunes which have hitherto not been proportional to its merits or to the labours bestowed upon its working.

## UNILATERAL CLUBBING OF THE FINGERS.

AT the meeting of the Société Médicale des Hôpitaux of Paris on March 22nd Dr. Béclère described a case in which the curious condition of clubbing of the fingers of only one hand was present. The left hand was normal; the right had the appearance shown in the third stage of pulmonary tuberculosis; the terminal phalanges were much enlarged and the nails were convex longitudinally as well as transversely. Radiographs showed that this enlargement was confined to the soft parts and that the bones were not affected—the usual condition in clubbed fingers. The patient was a man, aged 65 years, who had a pulsatile swelling of the size of a large egg in the right subclavicular region—no doubt a subclavian aneurysm. He could not state the time of the onset of the swelling, but he was very definite as to that of the deformity of the fingers; it began a year previously, a little after the appearance of severe pains in the right shoulder which radiated into the neck and hand. At this time, according to the patient, the hand was swollen and violaceous and the subclavicular region more voluminous than when he came under observation. Dr. Béclère thought that the subclavian artery, and probably

vein, had been the seat of acute inflammation which led to permanent narrowing of the latter. This hypothesis was confirmed by the fact that while at rest the hands were of the same colour, but on exertion the right became slightly cyanosed. The right radial pulse was only a very little weaker than the left. Dr. Béclère showed that the pathogenesis of this unilateral clubbing of the fingers was comparable to that present in congenital cyanosis due to stenosis of the pulmonary artery. In the latter condition the vessel which carries all the blood from the tissues of the body to the lungs is narrowed. As a consequence of the prolonged retention of substances to be eliminated by the lungs, principally $CO_2$, a chemical modification of the plasma which bathes the tissues of the periphery is produced. In the present case the obstruction to the venous circulation was local instead of general and therefore produced a local result. Dr. Béclère further suggested that in a similar manner the clubbing of the fingers in pulmonary diseases—phthisis, sclerosis of the lungs, and pleural effusion—is due to the narrowing or obliteration of some of the divisions of the pulmonary artery, which produces the same mechanical effect as narrowing of the artery itself.

## LEGISLATION ON PENNY ICES: A GOOD EXAMPLE.

THE corporation of Brighton has presented a measure which has just been accepted by a committee of the House of Commons. Though this is a matter of local legislation there is a clause which might with great advantage be embodied in the sanitary Acts that govern the entire kingdom. The Bill proposes to inflict a penalty of 40*s.* on any manufacturer or dealer in "ice-cream, hokey-pokey, or other similar commodity" who stores such articles in any room or cellar in which there is an opening to a drain or who, in the manufacture, sale, or storage of ice-creams, &c., does anything likely to expose them to infection or contamination. Further, it is provided that the corporation shall keep a register of makers and dealers in wares like ice-cream, and that any unregistered person who shall deal in these articles within the borough will render himself liable to a penalty of £5 and a daily penalty of 40*s.* For more than 20 years we have insisted that some such measure was necessary. We have described the homes of some of the Italian itinerant vendors, organ-grinders, and penny-ice men; we have shown how the various constituents are left exposed in small back-yards by the side of overflowing dust-bins and closets of unspeakable foulness. That bacteria may accompany the dust blown over the surface of the milk is obvious, and thus are the delicacies of the poor readily contaminated. That an industry carried out under such conditions should be qualified as an unwholesome industry is but natural, and it would be a farce to talk of controlling unwholesome industries if this were not included in the list. On the other hand, there is no reason why a thoroughly wholesome and good ice should not be provided for the modest sum of 1*d.*, particularly if it is sold from a barrow—that is to say, if the cost of production is not weighed down by the expense of keeping a shop. Still, the question arises as to where these ices are to be made. The street-vendors are by poverty driven to live in premises altogether unsuited for the storing and the production of such articles as ices. Where, then, are the ices to be manufactured? We would suggest that some arrangement might possibly be made with a model dairy or that special premises should be provided on the outskirts of the town where the purveyors could go in the morning, purchase the milk and eggs, make the ices on the spot, and in the evening return to these premises and there store their carts. For these facilities they could be charged a small rent. It would not then so much matter where they lived and slept. If all the ices were made and stored at one or two suitably constructed depôts the industry would be under thorough sanitary control. The poor might then still continue to enjoy their penny ices, the vendors might still hope to earn a livelihood by producing these modest luxuries, and parents would no longer be harrassed by the fear that their children ran the risk of being poisoned by the penny-ice man.

## THE CORONERSHIP OF THE CITY OF LONDON.

THE medical men at present offering themselves to the Court of Common Council as candidates for the coronership of the City of London are Mr. J. S. E. Cotman, Dr. Major Greenwood, Dr. Bernard O'Connor, and Dr. F. J. Waldo. Mr. Cotman is a member of the London County Council but has no legal qualification. Dr. Greenwood is the medical officer to the General Post Office and a barrister. Dr. O'Connor is also a barrister. Dr. Waldo, a barrister and medical officer of health of the Inner and Middle Temples, was lately medical officer of health of Southwark, where he did vigorous and fearless work for the public. He was runner-up to Dr. Collingridge for the appointment of medical officer of health to the City of London. We have also seen it announced that Dr. W. R. Smith, medical officer of the London School Board, will offer himself for election to the vacant post.

## LEUCOCYTOSIS IN TYPHOID PERFORATION.

THE importance of the study of the symptoms of perforation in typhoid fever with a view to early operation has recently been brought before the profession by Professor Osler.[1] One of the symptoms of perforation is leucocytosis, but its value yet remains to be appraised. In the *Boston Medical and Surgical Journal* of April 18th an important paper on this subject based on observations made in the Montreal General and Royal Victoria Hospitals has been published by Mr. Colin K. Russell. Leucocytosis must not be accepted off-hand as proof positive of perforation even when perforation has been previously suspected, for other conditions resembling it may produce leucocytosis. Conversely, in perforation the number of leucocytes in the blood may be diminished. In 37 examinations of the blood in uncomplicated cases of typhoid fever the leucocytes varied between 2000 and 12,000 per cubic millimetre, the average being about 6500. To obtain as uniform results as possible the counting was done at times remote from digestive periods. The following case, in which the signs of perforation were otherwise doubtful, shows the value of leucocytosis. A boy, aged seven years, on the tenth day of an ordinary attack of typhoid fever, complained of gradually increasing pain in the abdomen, especially in the right lower quadrant. There was no alteration in the pulse or temperature or rigidity or distension of the abdomen which showed only slight general tenderness. Vomiting occurred once. Four different examinations of the blood showed an average of 28,000 leucocytes per cubic millimetre. A few hours later there was thought to be slightly increased rigidity of the abdomen. Laparotomy showed a perforation near the mesenteric attachment of the ileum which was sutured. Recovery followed. In another case of perforation leucocytosis was absent. On the sixteenth day of the disease there were 6100 leucocytes per cubic millimetre. Four days later the classical signs of perforation suddenly developed, but the blood-count showed only 4800 leucocytes per cubic millimetre. The perforation was sutured, as also were six other ulcers which had nearly perforated, but the patient succumbed. In a third case pain suddenly appeared in the abdomen on the fourteenth day, chiefly in the left lower quadrant. The

[1] THE LANCET, Feb. 9th, 1901, p. 386.

pain gradually increased and within 32 hours marked rigidity was present. The leucocyte counts gave an average of 14,500 per cubic millimetre. But laparotomy revealed neither perforation nor peritonitis. Recovery followed. In a number of other complications of typhoid fever leucocytosis was found. In one patient in whom only simple bronchitis could be discovered there were 20,000 leucocytes per cubic millimetre, in a case of cholecystitis 13,000, and in one of general sepsis 13,000. Mr. Russell draws the following conclusions: (1) in perforation leucocytosis is the rule, but it varies widely; (2) it usually appears early, but may not be marked until general peritonitis and collapse have supervened; (3) it may be absent in marked perforation and peritonitis—in fact, the number of leucocytes may be below normal; (4) typical signs of perforation and leucocytosis may be present without any such complication; and (5) if abdominal pain and tenderness come on suddenly and if in the absence of other complications there is distinct leucocytosis, even without other signs of perforation, operation is justifiable and may be advisable.

## A "TUBE" DANGER.

IT is obvious that every possible precaution should be taken to prevent any alarms on the electric underground railways, because if a panic arises escape from any seeming danger is well-nigh impossible. A case in point occurred in Paris last week. A stack of timber adjoining one of the stations of the underground electric railway by some means or other caught fire and a train emerging from the tunnel plunged into the flames. The engine-driver, however, was smart enough to let his train go on through the station instead of stopping it, with the result at any rate that the passengers escaped the dangers of fire. But the tunnel on the other side was full of smoke, a panic arose, and several persons were badly injured in the scramble to get out of the train and the tunnel. This accident emphasises, as we have said, the necessity of keeping the line of route quite free from the possibility of dangers of this incidental sort. Apart from the risk of receiving a powerful current along the track there is the risk also of being deprived of air unless the ventilation is very efficient. In the accident at Paris, however, it is probable that the efficiency of the ventilation or the effect of the heat-currents served to draw both flame and smoke into the tunnel. By the good sense of the guard the passengers were warned to keep off the electric cable—a warning which probably made the whole occurrence less disastrous than it might have been.

## CONGENITAL MALPOSITION OF THE INTESTINES.

THE following case, which is published in the *Intercolonial Medical Journal of Australasia* by Mr. R. Hamilton Russell, is of interest both on account of the rarity of the pathological condition and the peculiarity of the symptoms. A boy, aged 11 years, was admitted to hospital. When seen on the following morning he was found in bed in the "knee-elbow position" and moaning with abdominal pain. The eyes were sunken, the skin was dry and scurfy, and the body was wasted. With difficulty he was induced to lie on his back, when the abdomen was found to be retracted. Examination of the abdomen seemed to bring on an attack of colicky pain which caused him to resume the knee-elbow position. He then commenced to vomit bile-stained fluid. The illness had commenced a fortnight previously with sudden abdominal pain and vomiting which continued more or less up to the time of admission. During this time the bowels acted only with the aid of enemata. At the age of three years an attack similar to the present one occurred. After six years of immunity another occurred. The practitioner who attended him said there was great difficulty in examining him on account of his "assuming a position like that figured to show the postural treatment of prolapsed funis." A month or two later another attack occurred which lasted three weeks. The mother "was sure the child was wrong inside." "His appetite had never been like that of other children; he often ate ravenously and craved for extraordinary articles." Some form of incomplete intestinal obstruction was diagnosed. As the child was seriously depressed and as he had recovered from similar attacks it was decided to postpone operation. An enema brought away a fairly copious motion. On the following morning he became collapsed and died. The necropsy showed deep congestion of the ascending and first part of the transverse colon and of the whole of the small intestine. The transverse colon was obstructed by the passage over it of a dense band. The exact anatomical condition could not be made out until the whole of the intestines had been removed from the body. The band was then found to be the first part of the jejunum together with the whole thickness of the mesentery, which took a sharp turn upwards to the right, passed in front of the transverse colon, then arched over and descended behind it. The entire small intestine was, so to speak, conveyed behind the ascending colon which was dilated and completely enveloped in peritoneum. This remarkable malposition of the intestines appears to have been of congenital origin and connected with the developmental migration of the cæcum. Mr. Russell suggests that the constant assumption by the child of the knee-elbow position was due to relief afforded from the pain which no doubt was chiefly caused by dragging upon the nerves of the mesentery. Similar cases of malposition of the intestines are rare. In THE LANCET a case of congenital malposition which terminated in fatal obstruction was published by Dr. Florence Boyd.[1] The patient was a woman, aged 39 years, who was subject to attacks of abdominal trouble characterised by distension, tenderness, and visible peristalsis. Mr. Russell concludes that in his case an operation would have been futile, for it would have been impossible to have made out the condition present or to have remedied it by any feasible procedure.

## "A LITTLE LEARNING."

WE have often had opportunities to notice the peculiarly thorough ignorance of matters in the least medical which is exhibited by writers in the general press. It is quite right, of course, that these gentlemen, and the rest of the non-medical public for that matter, should not through mere idle curiosity dabble in medicine or play about hospital wards. It is far better for them to regard medicine as a necessary evil and to keep away from all that concerns it, relying on their medical advisers for instruction when necessary. This laudable ignorance of medical matters, though, should be reckoned with by an editor when any work is to be criticised that touches at all on this unvisited province. By the exercise of a little discrimination in this way we should be spared the quaint exposition of ignorance made by a contemporary whose critic talks of a "corner of the dissecting-room heavy with the smell of ether." The dissecting-room in this gentleman's mind—as in that of the great lady who was the foundation of one of Du Maurier's pictures in *Punch* where a young couple shudder at the idea of taking a house near a West-end hospital because of the "shrieks from the dissecting-room"—is evidently synonymous with the operating theatre. We can confidently assure him that the two places are quite separate and that though the latter may be "heavy with the smell of

[1] THE LANCET, July 3rd, 1897, p. 8.

ether," the odour pervading the former is more commonly that due to various brands of tobacco.

## CHARING CROSS HOSPITAL: THE CHERE REINE LODGE OF FREEMASONS.

ALL Charing Cross Hospital men who are Freemasons will be pleased to hear that a warrant has been granted by Grand Lodge to found a lodge in connexion with Charing Cross Hospital. This lodge, the Chère Reine, No. 2853, will be consecrated on June 7th at the Hotel Cecil. Brethren who would like tickets for the ceremony or who desire to become joining members of the lodge are requested to communicate at once with Bro. Carter Braine, 67, Wimpole-street, W.

## SUGGESTION AND HYPNOTISM IN THEIR RELATION TO JURISPRUDENCE.

DR. BARON VON SCHRENCK-NOTZING of Munich contributes to the March number of the *Medico-Legal Journal* a valuable paper on the above subject based largely upon his own unrivalled experience in this field of psychological medicine. Criminal acts may be committed by hypnotised subjects while in the hypnotic stage, or by subjects in the state of wakefulness who had been previously hypnotised and influenced by suggestion to criminal acts. Moreover, the hypnotised subject may be abused or criminally wronged by the hypnotiser. Among criminal acts belonging to the last category attempts upon decency and morality occupy the first place. Such cases have been reported by Bellanger, Laurent, Ladame, Brouardel, Krafft-Ebing, and Schrenck-Notzing himself. "In all these cases there was always proved the undoubted existence of hypnotic sleep ..... for in order to carry out these crimes recourse had to be taken to the most profound hypnotisation, whereby the subject was deprived of the faculty of resistance or had become an automaton of the hypnotiser, and very often we had to deal with a condition of hysterical sleep or lethargy." Natural modesty and good bringing-up offer an undoubted resistance to sexual attempts and cannot be overcome by the help of a few opposite suggestions, whereas sensual temperaments are more easily seduced. There are all shades of difference between such resistance to criminal suggestion and absolute obedience. Two instances of sexual crimes committed under hypnotic suggestion came recently under notice and in a third instance also observed by Schrenck-Notzing a theft was committed under the influence of hypnotic action. Sexual attempts and theft constitute the majority of cases, but instances of abortion and of substitution of infants with the aid of hypnosis are not unknown. The suggestion of sickness to escape from military service is rare. Injury to health, especially mentally and morally, may be the result of hypnosis by laymen, professional magnetisers, and public performers who claim to work cures in this way. The dangers arising from taking part in magnetic *séances* and exhibitions of a semi-public character are not insignificant. After reaffirming the difficulty of inducing normal individuals of good *morale* and training to participate in criminal acts, even when induced thereto by hypnosis, Schrenck-Notzing refers to the greater importance of hypnotic suggestion in the condition of wakefulness. He quotes the case of the woman Sauter who was tried before the Court of Assizes at Munich in 1899. She was charged with the attempt to murder and with instigating several persons to murder. She was an ignorant woman under the influence of soothsayers and absolutely acquiesced in and attempted to carry out their suggestions. A full report of the case by Schrenck-Notzing was laid before the court and the woman was acquitted. It is pointed out that criminal suggestions in the waking state may have dangerous influence upon certain classes of persons—e.g., infants, hysterical persons, and persons with an easily excited imagination. A case is reported of a nurse who suffered from a mania of destructiveness but who was unscrupulous enough to suggest to her charge, a little girl aged seven years, that the latter should confess to the misdeeds. During nine months the little girl voluntarily made herself the scapegoat, confessed to being the wrongdoer, and voluntarily bore every punishment without ever betraying her nurse. Persons who commit crimes suggested to them are rarely of perfectly sane mind. But the more a person is without energy or strength of will or is the subject of congenital moral defect the more potent does suggestion become. Certain nervous ailments, such as hysteria, neurasthenia, epilepsy, and certain critical epochs of life, as puberty, and the menopause, render individuals more prone to suggestion for good or evil.

## UNIVERSITY OF LONDON: THE STANDING COMMITTEE OF THE FACULTY OF MEDICINE.

A MEETING of the members of Convocation of the University of London was held at the University's new building at South Kensington on Tuesday, May 14th, at 5 P.M. Sir E. H. Busk had been duly nominated for the appointment of chairman and Mr. H. E. Allen as clerk. Several alterations in the standing orders were proposed. The members of the standing committees were also elected. There were nine vacancies in the Faculty of Medicine and the little interest taken by the medical graduates in the proceedings of convocation under the new statutes is shown by the fact that four of the nine persons who have been duly nominated are connected with one medical school—viz., the London School of Medicine for Women.

A GENERAL meeting of the Medico-Psychological Association of Great Britain and Ireland will be held at 11, Chandos-street, Cavendish-square, W., on Thursday, May 23rd, at 3 P.M., under the presidency of Dr. Fletcher Beach, when Dr. Charles Mercier will read a paper on "Punishment," and Dr. R. P. Smith will deal with "A Case of Epileptic Homicide." Dr. D. G. Thomson will take for his subject "Senile Insanity." At two o'clock a number of slides showing the condition of nerve-cells and association fibres in cases of idiocy and juvenile general paralysis will be shown, and in the evening the members of the association will dine together at the Café Royal, Regent-street, W.

THE annual dinner of the British Balneological and Climatological Society will be held at Limmer's Hotel on Friday, May 31st, at 6.30 P.M., under the presidency of Dr. Frederic Bagshawe. Communications should be addressed to one of the honorary secretaries, Dr. S. Sunderland, 11, Cavendish-place, W., or Mr. Shirley Jones, Droitwich. After the dinner the annual conversazione will be held at 20, Hanover-square, when Dr. I. Burney Yeo will give an address on Hepatic Inadequacy.

THE annual meeting of the Association of Asylum Workers will be held at the Medical Society's House, 11, Chandos-street, Cavendish-square, W., on Friday, May 24th, at 4 P.M., Sir James Crichton-Browne, M.D. Edin., LL.D., F.R.S. (President of the association), in the chair. All interested in asylum work and workers are cordially invited to attend.

AMONGST the Australian Commonwealth honours recently bestowed at Melbourne by H.R.H. the Duke of Cornwall we are glad to notice the name of the medical Mayor of Sydney. We congratulate Sir James Graham, M.A., M.D. (gold

medal) Edin., M.B. Sydney (*ad eundem*), on being created a Knight Bachelor.

THE opening lecture of the summer session at Brompton Hospital for Consumption and Diseases of the Chest will be delivered by Dr. J. Mitchell Bruce on Wednesday, May 22nd, at 4 P.M. Subject: "On the Diagnosis, Prognosis, and Treatment of Quiescent Tuberculosis."

SIR WILLIAM MACCORMAC, Bart., K.C.B., K.C.V.O., has been elected a Foreign Associate Fellow of the College of Physicians of Philadelphia, the oldest medical body in America, having been founded by Benjamin Rush and other distinguished men in 1787.

AT the meeting of the University Court held in Carmarthen on May 10th Dr. Isambard Owen was for the seventh year in succession elected Senior Deputy Chancellor of the University of Wales.

THE Metropolitan Counties Branch of the British Medical Association will hold a conversazione in the Natural History Museum, South Kensington, at 8.30 P.M., on Wednesday, June 12th.

AN extra meeting of the Pathological Society of London will be held at Oxford on Saturday, July 6th, upon the invitation of Sir John Burdon Sanderson and Dr. J. Ritchie.

THE newly-appointed Bishop of Oxford, the Very Rev. Francis Paget, D.D., Dean of Christ Church, is the second son of the late Sir James Paget, Bart., F.R.C.S.

THE King has nominated Sir John Williams, Bart., M.D. Lond., to be a member of the General Medical Council for a term of five years.

LIEUTENANT-COLONEL BARTIE, V.C., C.M.G., has been temporarily appointed Assistant Director of the Army Medical Service.

DR. S. WEST has been appointed Joint Lecturer on Medicine at St. Bartholomew's Hospital, vice Sir Dyce Duckworth, resigned.

## MEDICAL MEN AND THE WORKMEN'S COMPENSATION ACTS.

### I.

THE Workmen's Compensation Act of 1897 considerably increased the liability of the employer to his workman when the latter was accidentally injured in those trades to which it applies, and imposed duties upon medical practitioners in connexion with the assessment of the workman's injuries beyond those naturally arising out of the ordinary summons to assist the injured in his home or the hospital.

The scope of this Act has now been enormously widened by a recent statute which extends its benefits to the agricultural labourer, stating that it "shall apply to the employment of workmen in agriculture by any employer who habitually employs one or more workmen in such employment," while, to quote further from the new Act, "where any workman is employed by the same employer mainly in agricultural but partly or occasionally in other work, this Act shall apply also to the employment of the workmen in such other work," and "the expression 'agriculture' includes horticulture, forestry, and the use of land for any purpose of husbandry, inclusive of the keeping or breeding of live stock, poultry, or bees and the growth of fruit and vegetables." From these definitions it will be seen that a workman in agriculture within the meaning of the Workmen's Compensation Acts is a member of a very large class indeed, and that not only the labourer who follows the plough will be entitled to compensation, but, if we may suggest an instance, the gardener who is also employed to drive and who meets with a carriage accident when engaged in the latter occupation. The country labourer does not meet with many accidents which do not arise "out of and in the course of his employment," and it will readily be seen that the majority of accidents occurring to him for which a medical man is called in may become the subject of claims for compensation. The new statute which protects the workman in agriculture comes into force on July 1st next, and it may be of interest to the enlarged class of medical men who will now be called upon from time to time to consider certain provisions of the Workmen's Compensation Act of 1897 if we set out and comment briefly on those which most intimately concern the medical profession. Until the Act of 1897 was passed the medical man, as a rule, became concerned with an action arising out of a workman's accident either because he had attended the injured man or because by his consent he had examined him on behalf of the employer. Under the Act we are discussing the employer to whom notice of an accident has been given by an injured workman can call upon the workman to submit himself to a medical man selected and paid by the employer, and further, after compensation has been awarded and while weekly payments are being made to the workman, the employer, or any person by whom the employer is entitled to be indemnified—as, for example, an insurer—can call upon the workman to submit himself to further examination either to a medical practitioner chosen and paid by the employer, or should the workman object to the medical practitioner or to the certificate given by him, then he may submit himself to one of the medical practitioners appointed for the purpose of the Act as medical referees. These are to be appointed by the Secretary of State and their expenses are to be paid out of moneys to be provided by Parliament. They have duties beyond those already indicated, for they may be called in when required by an arbitrator under the Act to report upon questions arising in the course of the arbitration.

Many very difficult questions of law have arisen under the Workmen's Compensation Acts, as they have under the Employers' Liability Act. We need not consider these at great length, but we shall indicate the scope of the Acts generally, as the medical man will be called in on many occasions by uneducated persons who in many cases will not be able to afford legal assistance. We have no desire to constitute the medical practitioner legal adviser to these, but he should be aware of the legal position of his patients so far as it affects his own and so far as it is readily ascertainable by him.

Before 1880 the workman injured in the course of his employment had a right to compensation by his employer in very few cases indeed. Where the employer caused by his own negligence the injury of his workmen he might be compelled by an action at common law to compensate him, but he owed him no compensation, such as he would to a stranger, if the negligence of a fellow-worker of the injured man caused the mishap, and there were defences open to the employer with regard to the workman's knowledge of the dangers of his employment and other matters that we need not go into. By the Employers' Liability Act of 1880 the employer was made liable in certain cases which did not cover all accidents, or apply to all employments, such as where the accident results from a defect in the condition of ways, works, machinery, or plant, or from the negligence of a person appointed by the employer to superintend work, or of any foreman whose order, obeyed by the workman, has resulted in his injury. Under the Workmen's Compensation Act, in addition to his previous liability at common law or under the Employers' Liability Act, the employer is liable if in any employment to which the Act applies "personal injury by accident arising out of and in course of the employment is caused to a workman," unless the accident is caused by the "serious and wilful misconduct" of the workman, and with the following further proviso, which directly involves the evidence of the medical man, that "the employer shall not be liable under this Act in respect of any injury which does not disable the workman for a period of at least two weeks from earning full wages at the work at which he was employed"—that is to say, before the workman can claim compensation there must

be a period of 14 days, not counting the day on which the accident happens or the day on which the workman returns to full work, during which he is disabled, and consequently slight injuries are not subjects for compensation. We need hardly point out that the question of the workman's inability to earn full wages during a precisely defined period is one which must largely depend on medical evidence, and that this provision of the law may well be borne in mind by the medical man while he is treating an accident that is otherwise within the Act.

Glancing at the conclusion of the Workmen's Compensation Act of 1897 before going further we find that it applies to "employment in or about a railway, factory, mine, quarry, or engineering work, or in or about any building which exceeds 30 feet in height, and is either being constructed or repaired by means of a scaffolding, or being demolished, or on which machinery driven by steam, water, or other mechanical power is being used for the purpose of the construction, repair, or demolition thereof." If to this definition is added that of the workman in agriculture from the Act of 1900 given above, the medical practitioner will have a general idea of the class of case in which his services may be required under these two statutes. He need not trouble himself with the legal combats that have raged over the construction of almost every phrase which we have quoted that purports to limit the accidents for which compensation is to be made, but he may remember that some of the most important actions arise where death has resulted and where there are dependants to be compensated, and that in these especially medical testimony may be of some effect in determining precisely the manner in which the accident occurred, and, further, that the question whether there was "serious and wilful misconduct" on the part of the workman is one of vital importance to his claim, or that of his dependants, for compensation. We need hardly say with reference to this class of evidence that the less a medical witness allows himself to be drawn into formulating speculative theories and the more strictly he confines himself to straightforward statements of fact, the better his evidence will stand criticism by a hostile advocate.

## ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary meeting of the Council was held on May 9th, the President, Sir WILLIAM MACCORMAC, Bart., K.C.B., K.C.V.O., being in the chair.

Mr. Priestley Smith and Major Ronald Ross were introduced and after signing the by-laws and making the required declaration they were admitted Fellows of the College.

Mr. William McAdam Eccles was introduced and the President handed to him the Jacksonian Prize, together with a document declaratory of the award.

On the recommendation of the Library Committee it was resolved to provide an additional store-room for books in the basement of the College.

The Committee on the annual report of the Council presented a report on the following letter from Mr. George Brown and Dr. Danford Thomas.

*To the President and Members of the Council of the Royal College of Surgeons of England.*

GENTLEMEN,—In accordance with the request of your Council as expressed in your letter of December 17th last, we beg to submit the following points in regard to which we are of opinion the Medical Acts require amendment, viz.:—

1. Alteration in the constitution of the General Medical Council to provide that the representatives of the Universities and Medical Corporations be elected respectively by their medical graduates and diplomates residing within the United Kingdom.

2. That admission to the Medical Register shall be obtained only by those who have passed the examinations of a Conjoint Board as instituted by the General Medical Council for each division of the kingdom. All the medical corporations in each division to be represented on the respective Divisional Conjoint Board.

3. That in lieu of the present method of registration there shall be an annual registration, the fee for which shall not exceed twenty shillings.

4. That no unregistered person shall practise medicine or surgery or any branch thereof for gain, or use any medical or surgical title or titles calculated to lead the public to believe that the person using such title or titles is a legally qualified medical practitioner.

5. That the practising of medicine or surgery or any branch thereof by any company or association whose members are wholly or in part unregistered persons be absolutely prohibited.

In addition to the above suggested reforms of the Medical Acts, we would draw attention to the desirability of the Council of the College, in the public interest, takings steps with a view to an amendment of the law relating to the sale of drugs so as to compel the vendors of all patent medicines and proprietary nostrums to state on the package or bottle containing the alleged remedy the exact composition.

In earnestly recommending the serious attention of the Council to the urgent necessity that exists for the above-mentioned reforms, we desire to thank the Council for the opportunity thus afforded for placing these views before them.

And we have the honour to remain,

Your obedient servants,

GEORGE BROWN.
GEO. DANFORD THOMAS.

The Council passed the following resolution:—

The Council are not prepared to promote the alterations suggested in paragraphs 1, 2, and 3. With regard to paragraph 4 the Council approve the principle that no unregistered person should be allowed to practise medicine or surgery for gain, and if the General Medical Council should deem it expedient to apply for an alteration of the Medical Acts to that effect the Council would support their action. Regarding paragraph 5 the Council deem it inexpedient at the present time. With regard to the suggestion that vendors of patent medicines and proprietary nostrums should be compelled to state on the package or bottle containing the alleged remedy the exact composition the Council are of opinion that it does not rest with them to initiate proposals for the amendment of the law relating to the sale of drugs.

Mr. R. J. Godlee was appointed a delegate from the College to the Congress on Tuberculosis to be held in London in July next.

The President was re-appointed the representative of the College on the Council of the Jenner Institute of Preventive Medicine.

The report of the Committee on the proposed changes in the regulations for the Licence in dental surgery was received, and it was referred to the Dental Board of Examiners to revise the regulations. The chief alterations will be that at the final examination the marks in anatomy and physiology and in surgery and pathology will be independent of those in dental anatomy and surgery, and that the candidate may be rejected in one part of the examination without being rejected in the other; and further, that candidates will be permitted to take the general anatomical and surgical and the dental parts of the examination separately. Moreover, courses of lectures on dental bacteriology and dental materia medica will be added to the curriculum.

Mr. J. HARDIE moved that it be referred to the Committee of Management to consider and to report upon the desirability of it being required of candidates for the Membership of the College to furnish certificates of having been taught the administration of anæsthetics. The subject was so referred.

The College accepted with thanks a portrait by Mr. T. B. Kennington of the late Dr. Richard Neale, presented by the Neale Testimonial Fund Committee.

Sir Frederick Treves, chairman of the Library Committee, presented to the College on behalf of Sir William Mac Cormac, the President, an album containing autograph photographs of all the celebrities attending the International Medical Congress held in London in 1881. These photographs had been collected by Sir William Mac Cormac, the honorary secretary-general to the Congress.

The thanks of the Council were voted for the gift.

The next meeting of the Council will be on June 20th.

## THE PRINCE OF WALES'S HOSPITAL FUND FOR LONDON.

A MEETING of the General Council of this fund was held on May 10th, at the residence of the Duke of Fife, 15, Portman-square, W., his Grace occupying the chair on behalf of H.R.H. the Duke of Cornwall and York.

The DUKE of FIFE announced the resignation of the presidency of the fund by the King, who would become its patron, and the acceptance of the presidency of the Fund by the Duke of Cornwall and York.

Mr. H. C. SMITH read the report of the General Council for the year ending 1900 which recorded an increase of £3000 in the total receipts for the year. Excluding the initial start in the Jubilee year the figures showed continuous progress—viz.: 1898, £39,272; 1899, £48,536; and 1900, £51,549. Although the receipts were only £3000 in excess of the previous year it was felt that the claims of the hospitals justified a larger distribution than before, and it was decided to award to the hospitals and convalescent

homes £50,000, as compared with £42,000 in the last year, being an increase of £8000. No appeal was made to the public for 18 months, so as to avoid any clashing with the various war funds, but shortly before the close of the year an appeal was issued. The response to this was somewhat disappointing, but with some special gifts it was only necessary to withdraw from the balance of the funds in hand a sum of £2183 8*s.* 4*d.* in order to make up the distribution of £50,000. The League of Mercy was enabled to contribute £6000 in 1900, as compared with £1000 in the previous year. The expenditure for the year had been £1960, as compared with £1853 in 1899. The report closed by stating that while the work of this Fund was limited to the London hospitals, yet the hospitals themselves were a centre of very wide influence, extending far beyond the limits of London; indeed, to a greater or less extent they affected the wellbeing of the whole Empire, as they supplied no inconsiderable proportion of the medical men whose services were afterwards devoted to all parts of the Empire.

Lord FARQUHAR, in seconding the adoption of the report, said that they hoped that the war which had engaged so much attention and had naturally drawn such large subscriptions from all private people for nearly two years was now coming to an end, and that, therefore, more funds would be available for the excellent cause that they were assembled to support. He referred to the way in which the hospitals had been visited and to the manner in which the Committee had awarded the different sums—a very important matter. It had given general satisfaction.

The Rev. T. BOWMAN STEPHENSON, Sir TREVOR LAWRENCE, Sir HENRY BURDETT, and Mr. J. G. CRAGGS having spoken on the motion it was put to the meeting and was carried unanimously.

On the motion of Lord ROTHSCHILD, seconded by Lord REAY, the accounts and balance-sheet were adopted and passed.

Lord DUNCANNON moved that Mr. A. D. Fripp, F.R.C.S. Eng., and Sir Savile Crossley (both of whom had returned from South Africa) be added to the list of visitors and expressed the hope that the gentlemen who had so kindly acted as visitors last year would continue to undertake this most important duty.

Lord IVEAGH having seconded the motion, various votes of thanks terminated the proceedings.

## VITAL STATISTICS.

### HEALTH OF ENGLISH TOWNS.

IN 33 of the largest English towns 6419 births and 3635 deaths were registered during the week ending May 11th. The annual rate of mortality in these towns, which had declined from 19·7 to 17·3 per 1000 in the four preceding weeks, further declined last week to 16·5. In London the death-rate was 15·9 per 1000, while it averaged 16·9 in the 32 large provincial towns. The lowest death-rates in these towns were 7·7 in Croydon, 11·6 in Plymouth, 12·7 in Birkenhead, and 13·2 in Gateshead; the highest rates were 19·6 in Hull, 20·4 in Swansea, 20·7 in Manchester, and 22·3 in Brighton. The 3635 deaths in these towns included 381 which were referred to the principal zymotic diseases, against 363 and 394 in the two preceding weeks; of these, 118 resulted from whooping-cough, 90 from measles, 63 from diphtheria, 46 from diarrhœal diseases, 38 from scarlet fever, 25 from "fever" (principally enteric), and one from small-pox. No death from any of these diseases was registered last week in Wolverhampton or in Huddersfield; in the other towns they caused the lowest death-rates in Croydon, Plymouth, Derby, and Birkenhead, and the highest rates in Portsmouth, Salford, Blackburn, and Sheffield. The greatest mortality from measles occurred in Portsmouth, Bolton, and Gateshead; from whooping-cough in Bristol, Swansea, Birmingham, Burnley, and Newcastle; and from "fever" in Blackburn. The mortality from scarlet fever and that from diarrhœal diseases showed no marked excess in any of the 33 large towns. The 63 deaths from diphtheria included 23 in London, 11 in Sheffield, four in Blackburn, three in Birmingham, three in Leicester, and three in Liverpool. One fatal case of small-pox was registered in London, but not one in any other of the 33 towns; and no small-pox patients remained under treatment in any of the Metropolitan Asylums hospitals on Saturday, May 11th. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of the week was 1913, against 1522 and 1705 on the two preceding Saturdays; 397 new cases were admitted during the week, against 150, 198, and 371 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 374, 286, and 251 in the three preceding weeks, further declined last week to 237, and were 73 below the corrected average. The causes of 35, or 1·0 per cent., of the deaths in the 33 towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Nottingham, Bradford, Hull, Newcastle, and 15 other smaller towns; the largest proportions of uncertified deaths were registered in Liverpool, Blackburn, Sheffield, and Gateshead.

### HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined from 24·1 to 21·2 per 1000 in the five preceding weeks, further decreased to 19·3 per 1000 during the week ending May 11th, but showed an excess of 2·8 per 1000 over the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 12·0 in Aberdeen and 15·1 in Perth to 21·6 in Greenock and 22·8 in Dundee. The 606 deaths in these towns included 49 which were referred to whooping-cough, 20 to diarrhœa, 17 to measles, eight to scarlet fever, four to diphtheria, and one to small-pox. In all, 99 deaths resulted from these principal zymotic diseases last week, against 120 and 83 in the two preceding weeks. These 99 deaths were equal to an annual rate of 3·2 per 1000, which was 1·5 per 1000 above the mean death-rate last week from the same diseases in the 33 large English towns. The fatal cases of whooping-cough, which had been 62 and 39 in the two preceding weeks, rose again last week to 49, of which 21 occurred in Glasgow, 16 in Edinburgh, six in Dundee, three in Leith, and two in Paisley. The deaths from diarrhœa, which had been 23, 13, and 12 in the three preceding weeks, rose again to 20 last week, and included nine in Glasgow, five in Dundee, and two in Paisley. The fatal cases of measles, which had been 25 and 17 in the two preceding weeks, were again 17 last week, of which six were registered in Edinburgh, six in Leith, and five in Glasgow. The eight deaths from scarlet fever corresponded with the number in each of the two preceding weeks, and included three in Dundee, two in Glasgow, and two in Edinburgh. The fatal cases of small-pox, which had been 10, three, and three in the three preceding weeks, decreased last week to one, which was registered in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 169 and 125 in the two preceding weeks, further declined last week to 116, but were 25 in excess of the number in the corresponding period of last year. The causes of 26, or more than 4 per cent., of the deaths in these eight towns last week were not certified.

### HEALTH OF DUBLIN.

The death-rate in Dublin, which had declined from 35·6 to 26·5 per 1000 in the four preceding weeks, rose again to 27·4 during the week ending May 11th. During the past four weeks the death-rate in the city has averaged 29·7 per 1000, the rates during the same period being 17·1 in London and 23·2 in Edinburgh. The 182 deaths of persons belonging to Dublin registered during the week under notice were six in excess of the number in the preceding week and included 15 which were referred to the principal zymotic diseases, against 10 and 13 in the two preceding weeks; of these, seven resulted from whooping-cough, three from diarrhœa, two from scarlet fever, two from "fever," and one from measles. These 15 deaths were equal to an annual rate of 2·2 per 1000, the zymotic death-rate during the same period being 1·6 in London and 4·4 in Edinburgh. The fatal cases of whooping-cough, which had been eight and nine in the two preceding weeks, declined again last week to seven. The three deaths from diarrhœa showed a slight excess over the number in the preceding week. The fatal cases of "fever," which had been three, one, and two in the three preceding weeks,

## ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON DURING APRIL, 1901.

*(Specially compiled for* THE LANCET.)

| CITIES AND BOROUGHS. | Estimated population in the middle of 1901. | NOTIFIED CASES OF INFECTIOUS DISEASE. | | | | | | | | | | | DEATHS FROM PRINCIPAL INFECTIOUS DISEASES. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Small-pox. | Scarlet fever. | Diphtheria.* | Typhus fever. | Enteric fever. | Other continued fevers. | Puerperal fever. | Erysipelas. | Cholera. | Total. | Annual rate per 1000 persons living. | Small-pox. | Measles. | Scarlet fever. | Diphtheria.* | Whooping-cough. | Typhus fever. | Enteric fever. | Other continued fevers. | Diarrhœal diseases. | Total. | Annual rate per 1000 persons living. | Deaths from all causes. | Death-rate per 1000 living. | Deaths of infants under one year to 1000 births. |
| **LONDON** ... ... ... ... ... ... ... | 4,543,727 | — | 784 | 421 | 2 | 117 | 1 | 16 | 259 | — | 1900 | 5·2 | — | 176 | 25 | 75 | 241 | — | 26 | — | 46 | 589 | 1·7 | 6143 | 17·6 | 122 |
| *West Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Paddington ... ... ... ... ... ... | 144,154 | — | 23 | 11 | — | 5 | — | — | 8 | — | 47 | 4·3 | — | — | — | 1 | 13 | — | 2 | — | — | 16 | 1·4 | 149 | 13·5 | 121 |
| Kensington ... ... ... ... ... ... | 176,787 | — | 19 | 15 | — | 5 | — | 1 | 9 | — | 49 | 3·6 | — | 1 | — | 4 | 15 | — | 1 | — | 1 | 22 | 1·6 | 202 | 14·9 | 173 |
| Hammersmith ... ... ... ... ... | 112,619 | — | 25 | 15 | — | 1 | — | — | 5 | — | 46 | 5·3 | — | 1 | 1 | 1 | 15 | — | 1 | — | — | 19 | 2·2 | 152 | 17·6 | 123 |
| Fulham ... ... ... ... ... ... ... | 138,426 | — | 49 | 27 | — | 3 | — | 1 | 7 | — | 87 | 8·2 | — | 3 | 2 | 4 | 10 | — | 1 | — | 2 | 22 | 2·1 | 167 | 15·7 | 104 |
| Chelsea ... ... ... ... ... ... ... | 73,879 | — | 11 | 7 | — | 2 | — | — | 3 | — | 23 | 4·1 | — | — | — | — | 4 | — | 1 | — | — | 5 | 0·9 | 102 | 18·0 | 155 |
| City of Westminster ... ... ... ... | 182,502 | — | 18 | 15 | — | 3 | — | — | 5 | — | 41 | 2·9 | — | 2 | — | — | 11 | — | — | — | 2 | 15 | 1·1 | 252 | 18·0 | 158 |
| *North Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| St. Marylebone ... ... ... ... ... | 133,000 | — | 29 | 17 | — | 2 | — | 1 | 14 | — | 63 | 6·2 | — | — | 1 | 4 | 8 | — | — | — | 1 | 14 | 1·4 | 172 | 16·9 | 60 |
| Hampstead ... ... ... ... ... ... | 82,246 | — | 14 | 16 | — | 2 | — | — | 1 | — | 33 | 5·2 | — | — | — | 1 | 7 | — | — | — | 1 | 9 | 1·4 | 66 | 10·5 | 124 |
| St. Pancras ... ... ... ... ... ... | 235,297 | — | 29 | 23 | — | 8 | — | — | 9 | — | 69 | 5·5 | — | 3 | 6 | 2 | 13 | — | 1 | — | 1 | 26 | 1·4 | 314 | 17·4 | 102 |
| Islington ... ... ... ... ... ... ... | 335,325 | — | 45 | 49 | 1 | 11 | — | 2 | 15 | — | 123 | 4·8 | — | 7 | — | 8 | 9 | — | 2 | — | 3 | 29 | 1·1 | 452 | 17·6 | 139 |
| Stoke Newington ... ... ... ... ... | 51,328 | — | 7 | 5 | — | 2 | — | 1 | 2 | — | 17 | 4·3 | — | 2 | — | — | 2 | — | — | — | — | 4 | 1·0 | 70 | 17·6 | 93 |
| Hackney ... ... ... ... ... ... ... | 219,780 | — | 24 | 45 | — | 8 | — | 1 | 19 | — | 97 | 5·3 | — | 16 | 4 | 11 | 6 | — | 1 | — | 1 | 41 | 2·4 | 290 | 17·2 | 109 |
| *Central Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Holborn ... ... ... ... ... ... ... | 59,205 | — | 11 | 3 | — | 1 | — | 1 | 4 | — | 20 | 4·4 | — | 1 | — | — | — | — | — | — | 1 | 2 | 0·4 | 88 | 19·4 | 98 |
| Finsbury ... ... ... ... ... ... ... | 101,233 | — | 19 | 11 | — | 1 | — | — | 10 | — | 41 | 5·3 | — | 2 | — | 1 | 1 | — | — | — | 3 | 7 | 0·9 | 156 | 20·1 | 129 |
| City of London ... ... ... ... ... | 26,638 | — | 2 | 4 | — | 1 | — | — | 1 | — | 8 | 3·9 | — | — | — | 2 | — | — | — | — | — | 2 | 1·0 | 52 | 25·5 | 121 |
| *East Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shoreditch ... ... ... ... ... ... | 118,564 | — | 9 | 18 | — | 10 | 1 | 1 | 4 | — | 43 | 4·7 | — | 1 | 1 | — | 13 | — | 1 | — | 2 | 18 | 2·0 | 202 | 22·1 | 157 |
| Bethnal Green ... ... ... ... ... | 129,700 | — | 17 | 13 | — | 3 | — | — | 14 | — | 47 | 4·7 | — | 8 | 2 | 2 | 3 | — | — | — | 2 | 17 | 1·7 | 199 | 20·0 | 82 |
| Stepney ... ... ... ... ... ... ... | 298,884 | — | 39 | 54 | 1 | 6 | — | 1 | 26 | — | 127 | 5·5 | — | 22 | — | 4 | 5 | — | 3 | — | 4 | 36 | 1·7 | 459 | 20·0 | 119 |
| Poplar ... ... ... ... ... ... ... | 168,887 | — | 24 | 30 | — | 3 | — | 1 | 9 | — | 67 | 5·2 | — | 6 | 1 | 2 | 9 | — | 3 | — | 3 | 24 | 1·9 | 247 | 19·1 | 125 |
| *South Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Southwark ... ... ... ... ... ... | 206,219 | — | 56 | 35 | — | 5 | — | — | 11 | — | 107 | 6·6 | — | 13 | — | 5 | 16 | — | 2 | — | 3 | 39 | 2·5 | 309 | 23·3 | 140 |
| Bermondsey ... ... ... ... ... ... | 130,348 | — | 28 | 21 | — | 6 | — | — | 9 | — | 62 | 6·2 | — | 13 | 2 | — | 8 | — | 1 | — | — | 24 | 2·4 | 238 | 22·9 | 152 |
| Lambeth ... ... ... ... ... ... ... | 302,460 | — | 47 | 25 | — | 1 | — | 1 | 18 | — | 92 | 4·0 | — | 8 | 1 | 3 | 19 | — | — | — | — | 31 | 1·3 | 400 | 17·2 | 125 |
| Battersea ... ... ... ... ... ... | 169,364 | — | 25 | 25 | — | 3 | — | — | 6 | — | 62 | 4·8 | — | 7 | — | 3 | 17 | — | — | — | 4 | 31 | 2·4 | 241 | 18·6 | 145 |
| Wandsworth ... ... ... ... ... ... | 233,943 | — | 40 | 24 | — | 3 | — | — | 16 | — | 83 | 4·6 | — | 8 | — | 1 | 6 | — | 2 | — | 4 | 21 | 1·2 | 251 | 14·0 | 141 |
| Camberwell ... ... ... ... ... ... | 259,897 | — | 51 | 46 | — | 7 | — | 1 | 9 | — | 114 | 5·7 | — | 31 | — | 7 | 12 | — | 1 | — | 1 | 55 | 2·8 | 360 | 18·1 | 112 |
| Deptford ... ... ... ... ... ... ... | 110,732 | — | 21 | 28 | — | 4 | — | — | 6 | — | 57 | 6·7 | — | 7 | 2 | 2 | 6 | — | 1 | — | 2 | 20 | 2·4 | 146 | 17·2 | 114 |
| Greenwich ... ... ... ... ... ... | 96,188 | — | 18 | 9 | — | 3 | — | 2 | 7 | — | 39 | 5·3 | — | 7 | — | 2 | 7 | — | 1 | — | 1 | 18 | 2·4 | 114 | 15·4 | 94 |
| Lewisham ... ... ... ... ... ... | 128,423 | — | 34 | 10 | — | — | — | — | 7 | — | 51 | 5·2 | — | 1 | 1 | 3 | 3 | — | 1 | — | 2 | 11 | 1·1 | 115 | 11·7 | 79 |
| Woolwich ... ... ... ... ... ... | 117,619 | — | 21 | 19 | — | 7 | — | 1 | 5 | — | 53 | 6·0 | — | 1 | 1 | 2 | 3 | — | — | — | 2 | 9 | 1·0 | 129 | 14·3 | 76 |
| Port of London ... ... ... ... ... | — | — | 1 | — | — | 1 | — | — | — | — | 2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

* Including membranous croup.

were again two last week. The 182 deaths in Dublin last week included 30 of children under one year of age and 48 of persons aged upwards of 60 years; the deaths both of infants and of elderly persons were in excess of the numbers recorded in the preceding week. Four inquest cases and two deaths from violence were registered; and 77, or more than two-fifths, of the deaths occurred in public institutions. The causes of 10, or more than five per cent., of the deaths in the city last week were not certified.

### VITAL STATISTICS OF LONDON DURING APRIL, 1901.

IN the accompanying table will be found summarised complete statistics relating to sickness and mortality in each of the 29 cities and boroughs in the county of London. With regard to the notified cases of infectious diseases the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to an annual rate of 5·2 per 1000 of the population, provisionally estimated, on the basis of the unrevised results of the recent Census, to be 4,543,727 persons in the middle of the year. In the three preceding months the rates had been 6·2, 5·7, and 5·2 per 1000 respectively. The rates were considerably below the average in Paddington, Kensington, Chelsea, City of Westminster, Stoke Newington, City of London, and Lambeth; while they showed the largest excess in Fulham, St. Marylebone, Southwark, Bermondsey, Deptford, and Woolwich. No case of small-pox was notified in London last month and no small-pox patients were under treatment in any of the Metropolitan Asylums hospitals at the end of April. Scarlet fever was more prevalent last month than in either of the two preceding months; among the various metropolitan boroughs this disease showed the highest proportional prevalence in Hammersmith, Fulham, St. Marylebone, St. Pancras, Southwark, and Lewisham. The Metropolitan Asylums hospitals contained 1491 scarlet fever patients at the end of April, against 1979, 1791, and 1533 at the end of the three preceding months; the weekly admissions averaged 179, against 164, 156, and 142, in the three preceding months. The prevalence of diphtheria showed a marked decline from that recorded in any recent month; the greatest proportional prevalence of this disease occurred in Fulham, Hampstead, Hackney, Stepney, Poplar, and Deptford boroughs. There were 960 diphtheria patients under treatment in the Metropolitan Asylums hospitals at the end of April, against 1113, 1111, and 1084 at the end of the three preceding months; the weekly admissions averaged 117, against 129, 136, and 134 in the three preceding months. The prevalence of enteric fever last month showed a further decline from that recorded in recent months; among the various metropolitan boroughs this disease was proportionally most prevalent in Stoke Newington, Hackney, Shoreditch, Bermondsey, Deptford, and Woolwich. The number of enteric fever patients under treatment in the Metropolitan Asylums hospitals, which had been 299, 224, and 162 at the end of the three preceding months, had further fallen to 121 at the end of April; the weekly admissions averaged 16, against 32, 25, and 18 in the three preceding months. Erysipelas was proportionally most prevalent in St. Marylebone, Hackney, Finsbury, Bethnal Green, Stepney, and Greenwich. The 16 cases of puerperal fever included two in Islington and two in Greenwich.

The mortality statistics in the table relate to the deaths of persons actually belonging to the various metropolitan boroughs, the deaths occurring in the public institutions of London having been distributed among the various boroughs in which the patients had previously resided. During the four weeks ending April 27th the deaths of 6143 persons belonging to London were registered, equal to an annual rate of 17·6 per 1000, against 17·5, 19·4, and 17·8 per 1000 in the three preceding months. The lowest death-rates last month in the various metropolitan boroughs were 10·5 in Hampstead, 11·7 in Lewisham, 13·5 in Paddington, 14·0 in Wandsworth, 14·3 in Woolwich, and 14·9 in Kensington; the highest rates were 20·0 in Bethnal Green and in Stepney, 20·1 in Finsbury, 22·1 in Shoreditch, 22·8 in Bermondsey, 23·3 in Southwark, and 25·5 in the City of London. During the four weeks of April 589 deaths were referred to the principal zymotic diseases; of these, 176 resulted from measles, 25 from scarlet fever, 75 from diphtheria, 241 from whooping-cough, 26 from enteric fever, and 46 from diarrhœal diseases. The lowest death-rates last month from these diseases occurred in Chelsea, Stoke Newington, Holborn, Finsbury, City of London, and Woolwich; and the highest rates in Hackney, Southwark, Bermondsey, Battersea, Camberwell, Deptford, and Greenwich. The 176 deaths from measles were 135 below the corrected average; this disease was proportionally most fatal in Hackney, Stepney, Southwark, Bermondsey, Camberwell, Deptford, and Greenwich. The 25 fatal cases of scarlet fever showed a decline of 34 from the average number in the corresponding periods of the 10 preceding years; among the various metropolitan boroughs the greatest proportional mortality from this disease occurred in Fulham, St. Pancras, Hackney, Bethnal Green, Bermondsey, and Deptford. The 75 deaths from diphtheria were 69 below the corrected average; this disease was proportionally most fatal in Fulham, St. Marylebone, Hackney, City of London, Southwark, and Camberwell. The 241 fatal cases of whooping cough showed a slight decline from the average number in the corresponding periods of the 10 preceding years; among the various metropolitan boroughs the greatest proportional mortality from this disease occurred in Kensington, Hammersmith, Fulham, Hampstead, Southwark, and Battersea. The 26 deaths from enteric fever were slightly below the corrected average number; the highest death-rates from this disease occurred in Paddington, Chelsea, Stepney, Poplar, and Southwark. The 46 deaths from diarrhœal diseases showed a slight decline from the average number in the corresponding periods of the 10 preceding years; among the various metropolitan boroughs diarrhœa was proportionally most fatal in Finsbury, Poplar, Battersea, Wandsworth, Deptford, and Woolwich. In conclusion, it may be stated that the aggregate mortality from these principal zymotic diseases in London during April was nearly 31 per cent. below the average.

Infant mortality in London last month, measured by the proportion of deaths of children under one year of age to registered births, was equal to 122 per 1000. The lowest rates of infant mortality were recorded in St. Marylebone, Stoke Newington, Bethnal Green, Greenwich, Lewisham, and Woolwich; and the highest rates in Kensington, Chelsea, City of Westminster, Shoreditch, Bermondsey, and Battersea.

## THE SERVICES.

### ROYAL NAVY MEDICAL SERVICE.

THE following appointments are notified:—Staff Surgeons: Matthew to the *Eclipse*; J. A. Moore and W. W. Pryn to the *President*. Surgeons: G. G. Borrett to the *Minerva*; S. Roach to the *Pembroke*; F. H. A. Clayton to the *Pelorus*; and A. J. Hewitt to the *Eclipse*.

*1st Life Guards:* Surgeon-Lieutenant-Colonel Horatio R. O. Cross retires on retired pay.

### ROYAL ARMY MEDICAL CORPS.

Civil Surgeon R. M. Cowie to be Lieutenant. Major M. Kelly, assistant registrar to the principal medical officer, Netley, is under orders for South Africa. He is to be succeeded at Netley by Captain P. H. Whiston, who has been seconded for service with the Egyptian Army and who is under orders to join his appointment at Netley on May 24th. Captain P. H. Whiston reported his arrival at the Royal Victoria Hospital, Netley, on May 11th. Lieutenant-Colonel W. Rowney succeeds Lieutenant-Colonel Corban in medical charge of the 3rd Station Hospital, and the command of No. 3 Company, R.A.M.C., Aldershot. Captain H. A. Stalkartt assumes medical charge of troops, Station Hospital, &c., Perth. Lieutenants H. R. Bateman and A. D. Jameson have embarked for Egypt.

### MILITIA MEDICAL STAFF CORPS.

Stuart Gerald McAllum to be Surgeon-Lieutenant.

### VOLUNTEER CORPS.

*Artillery:* 2nd Sussex: Surgeon-Captain H. Habgood to be Surgeon-Major. *Submarine Miners:* The Clyde Division: James Eric Wilson to be Surgeon-Lieutenant. *Rifle:* 1st Volunteer Battalion the King's (Liverpool Regiment): Thomas Henry Agnew to be Surgeon-Lieutenant. 3rd Volunteer Battalion the Devonshire Regiment: E. R. Tweed to

be Surgeon-Lieutenant. 3rd (Cambridgeshire) Volunteer Battalion the Suffolk Regiment: Surgeon-Lieutenant E. L. Jones to be Surgeon-Captain. 2nd Volunteer Battalion the Prince of Wales's Volunteers (South Lancashire Regiment): Surgeon-Lieutenant C. Barlow resigns his commission. 2nd Volunteer Battalion the Gordon Highlanders: Surgeon-Lieutenant-Colonel W. Mortimer retires, with permission to retain his rank and to wear the uniform of the battalion on retirement; William Cockburn to be Surgeon-Lieutenant. 7th Middlesex (London Scottish): Alexander Howard Pirie to be Surgeon-Lieutenant. 24th Middlesex: Surgeon-Major J. D. Grant resigns his commission, with permission to retain his rank and to wear the uniform of the corps on retirement.

### MENTIONED IN DESPATCHES.

In a despatch received by the Secretary of State for India from Lieutenant-General Sir Alfred Gaselee, K.C.B., commanding the British contingent of the China Expeditionary Force, dated headquarters, Peking, Jan. 17th, 1901, the following passages occur:—

The medical department have, I rejoice to say, not been severely tested by this campaign, and ample provision for contingencies was made by Government. The number of sick and wounded on the march to Peking was comparatively small and the river afforded an easy and rapid means of transferring the sick from the front to the base, while at Tientsin and Wei-hai-Wei suitable hospitals had been prepared for their reception. Credit for the good arrangements on the march are chiefly due to Lieutenant-Colonel W. J. R. Rainsford, Royal Army Medical Corps, and Major C. C. Manifold, Indian Medical Service.

Colonel J. B. Bookey, principal medical officer during the first part of the operations, is an experienced officer of long service whose advice was valuable and who performed his duties to my satisfaction until he was unfortunately invalided.

In addition to the officers named I would mention for their good services the following: Major J. M. Reid, R.A.M.C.; Major H. E. Cree, R.A.M.C.; Lieutenant-Colonel E. M. Damis, I.M.S.; Lieutenant-Colonel L. A. Waddell, I.M.S., who has shown himself to be a particularly good organiser; Lieutenant-Colonel D. B. Spencer, I.M.S.; Lieutenant-Colonel G. E. Fooks, I.M.S.; Major W. W. White, I.M.S.; Major H. F. Whitchurch, V.C., I.M.S.; and Captain W. H. Kenrick, I.M.S. I would further wish to here record the great value to this force of the hospital ship *Gwalior*, which was so loyalty and generously placed at the disposal of Her Majesty's troops in China by Colonel His Highness the Maharaja Sindhia of Gwalior, G.C.S.I.

### SOUTH AFRICAN WAR NOTES.

Surgeon-Captain J. De B. Griffith of the 3rd Victorian Bushmen left Cape Town on May 9th for Australia in the *Morayshire*.

Major Rickets, R.A.M.C., Major J. Osburne, R.A.M.C., Lieutenant Forbes Winslow, R.A.M.C., and Civil Surgeons Hunter, Collier, and Davison are on passage home.

Civil Surgeon R. Wilbond is reported dangerously ill at Springfontein.

Civil Surgeon Sowden's condition is reported unchanged.

Lieutenant-Colonel J. L. Hall, R.A.M.C., Major S. Hickson, R.A.M.C., Captain R. D. Jephson, R.A.M.C., and Civil Surgeons S. Wicks, Rust, Corkerton, and H. F. Hine, have been discharged from hospital to duty.

### THE DEBATE ON THE NEW ARMY SCHEME.

The central point of the recent debate in the House of Commons on Mr. Brodrick's new army organisation scheme really consists in the question: Where are the men to be found to meet its requirements and to fill the new army corps? It does not seem to us that army corps are to be considered as the organisation most suitable for this country because they happen to be the best adapted for the big Continental Powers. The circumstances are quite different in the two cases. But whether the required additions to the strength of the army should go to the formation of the proposed army corps or not does not much matter. It makes but little difference what is to be the military nomenclature or organisation so long as the soldiers are not forthcoming. The outlook for the success of any scheme is not, it must be confessed, very re-assuring, for it is not at all clear that the numbers required can be obtained at the present rate of pay. Be that as it may, we want, if possible, to obtain a stronger and, on the whole, a more intelligent type of recruits. Whilst a war fever is present there is no difficulty in getting them, and the question arises whether more cannot be done in time of peace to make the army more attractive than it is. We have already expressed our belief that much could be done in this direction. Our recruiting barracks and depôts in towns need to be greatly improved and not hidden away in back streets. More commissions should be given to the rank and file, for there are many gentlemen and men of education serving in the ranks. The soldier might be given more freedom without endangering military discipline by doing away with all unnecessary drills and many irksome military observances and restraints; and the popularity of the service might be increased by the abolition of hospital stoppages, by the provision of dining-halls, by the laying on of hot water for baths and lavatories in barracks, and by the better lighting of barrack-rooms so as to make them more comfortable and cheerful than at present. But we confess that we do not believe that the provision of barrack-room cubicles (to say nothing of any possible hygienic, military, and moral objections to them) will have any favourable influence on recruiting.

### LIEUTENANT-COLONEL BABTIE, V.C., C.M.G.

Lieutenant-Colonel Babtie has been temporarily appointed Assistant Director of the Army Medical Service. Lieutenant-Colonel Babtie served in the occupation of Crete, 1897–98, as senior medical officer (C.M.G.). He served in South Africa with the Ladysmith relief force and was present at the battle of Colenso, where he earned his V.C.

### DEATHS IN THE SERVICES.

Brigade-Surgeon William Beale Wallis, late 74th Highlanders, on May 6th, at Colchester, aged 71 years. He entered the service in 1853, and was promoted surgeon in 1862 and surgeon-major in 1873. He retired in 1881.

# Correspondence.

"Audi alteram partem."

## "THE MEDICAL PROFESSION AND THE FRIENDLY SOCIETIES."

*To the Editors of* THE LANCET.

SIRS,—Mr. Brabrook's letter in THE LANCET of April 27th, p. 1232, is evidently written with a view to bringing together the friendly societies and their medical officers. With your permission I would like to draw attention to a few points in the dispute. Mr. Brabrook says "the real question is the proper remuneration of the medical man, and the wage-limit is only a part of that question." Proper remuneration is undoubtedly the chief question, and it is equally certain that, as a rule, the present prices are no remuneration whatever. I am glad to see the assertion made that the societies are "neither beggars nor sweaters" and only wish that such a statement could be verified by facts. In too many instances they, on the one hand, beg well-to-do members to join, holding out the free doctor as an inducement, and so, on the other hand, sweat the doctor.

Medical men have always been ready to act charitably in the matter of fees towards those in poor circumstances, and club prices were undoubtedly originally fixed with this question of partial charity towards the poor in view. If the patients of the same class, who are now in many cases earning double the wage and enjoying many luxuries unknown to their fathers, expect that not only they but also really well-to-do people are to be treated still at anything like the same rate they surely must be laying themselves open to the charge of sweating.

I have frequently heard it admitted by those in good positions that they join the club simply for the doctor—that is to say, that they pay something like 6*d*. per week to the club, 5*d*. of which is supposed to be for sick-pay and 1*d*. or ½*d*. for medical attendance. They are too proud or, as they would say, too philanthropic, to accept the sick relief, but they will accept the services of the club doctor. In other words, they are willingly paying 26*s*. per annum for certain work, but only 4*s*. 4*d*. or 2*s*. 2*d*. actually reaches the man who does the work, the whole of the rest being absorbed by the middleman, the club. Is not that sweating? Is not that, indeed, sweating in a very pronounced form? Naturally, these are the very men whom the societies beg to join and equally naturally they are the very men whom we wish to keep out. I have known the largest shopkeeper and most extensive property owner in a small town admit to joining two clubs so as to be able to call in two different doctors and with no intention of ever receiving sick-pay. Is not that sweating? Club members often assert that they know clubs cannot pay the doctors, but that they act as an advertisement. Is not that sweating?

Again, I believe that in some districts members who are debarred from receiving sick-pay on account of their illnesses being the direct result of intoxication or other vice still expect to receive the medical officer's services without extra payment. Is that fair? I am glad to say that in my own district the committees of two clubs have recently corroborated my view of the rules that "debarred from benefit" means debarred from every form of benefit, including the greatest of all—viz., medical attendance. I think Mr. Brabrook must admit that these actual instances must cast the suspicion of sweating upon the friendly societies. With regard to other matters than the actual fee paid it must be conceded that club patients are by no means the easiest to attend; they often ignore surgery hours entirely and send absurdly urgent messages in unnecessary cases and then plead that they did not wish you to hurry. I myself have received a telegram from a club patient not asking for, but fixing, an appointment at the surgery for the middle of the afternoon, a time at which a country medical man is generally far from home. With ordinary patients these abuses can be checked to some extent by special fees for evening and night work, but not so with club patients.

With regard to the actual question of fees and the abolition of wage-limit Mr. Brabrook says, "all join for the same benefit." Now I maintain that they do not, and will try to explain myself. It may be taken that a member's subscription is paid to insure himself against two evils: (1) cessation of income during illness and (2) the medical man's bill. He cannot insure against sickness itself but can do so against its consequences. Whitaker's Almanack and other books of reference distinctly assert that medical fees are assessed upon a sliding scale, the reason of course being that the fees which the poor are able to pay are no adequate remuneration. The higher a man's income the better fees is he supposed to pay; therefore evil No. 2, the medical man's bill, will demand a higher premium according as the income is higher. If only the class for whom Mr. Brabrook speaks would take to heart his assertion that "there is much in the kindly service of a medical man that no money can purchase," there would be more chance of coming to terms, but too many still deny that a medical man is a free agent, preferring to look upon him as a public slave bound to go wherever and whenever sent for. Working men or, as they will soon have to be called, the leisured classes, should be the first to admit the value of short hours and should be ready to help the medical man to secure the same by seeing that he is better paid for the hours during which he does work. In any revision of club tariff, in addition to increased subscriptions, might there not also be inserted extra charges for late messages and night work, if only to draw the attention of members to the fact that such should be avoided as much as possible. This is only in accordance with the practice of the workman, who charges extra prices for overtime if he consents to do anything after the usual hours.

I consider that friction between clubs and their doctors would be lessened considerably if the latter were looked upon more as medical men and less as paid officials of the club. If a uniform rate for specified incomes and for a specified radius could only be arrived at then it ought to be possible for each member at the commencement of each year to choose to which doctor his subscription shall be paid. Each individual member would then have his own free choice and the power (which is sometimes used in an objectionable manner) of the committee would be practically at an end. Before Skill and Thrift, as Mr. Brabrook calls the two parties, can work together harmoniously Thrift must disabuse himself of the idea that Skill is making a fortune, but must, at the same time, admit that Skill has at least an equal right with the shopkeeper and the publican to make a decent living.

If friendly societies can only be brought to see these things in their proper light and will look upon medical men as their hard-working fellow-men I feel sure they will be willing to increase their own subscriptions instead of trying to persuade richer men to join them in sweating the club doctor. If they cannot see this in such a light they must remember that they have taught us that union is strength and that some day, perhaps, even the medical profession may rise in its might and assert its right to live by doing a fair day's work. I must apologise for the length of this letter, especially as I have not had nearly so much experience as many with clubs, but I wish to point out a few difficulties which have arisen within my own limited scope.

I am, Sirs, yours faithfully,

C. H. POWERS, L.R.C.P. Lond., M.R.C.S. Eng.

Gosforth, Cumberland, May 7th, 1901.

## "ON THE CAUSATION AND TREATMENT OF PROFUSE EPISTAXIS IN PEOPLE BEYOND MIDDLE AGE."

*To the Editors of* THE LANCET.

SIRS,—May I send a few lines to supplement my paper on the above subject which appeared in THE LANCET of April 20th, 1901, p. 1133, and to answer some of your queries? In all my cases the hæmorrhage was purely passive—i.e., it was venous hæmorrhage due to an over-filled venous system. The patients were all with one exception over 60 years of age and were all what is commonly called "gouty," having suffered from eczema, &c., though only one had had an attack of true sthenic gout. The more or less chronic state of high arterial tension was, I think, due in all to what has been called "lithæmia," "uricacidæmia," &c.—a condition which so commonly produces cardio-vascular degenerative changes in well-to-do people of 50 years and upwards. In these cases there is usually no history of any injury or any great exertion or strain, but the patients as a rule complain of having felt tired and fatigued for some time, they get more easily out of breath, and feel going up-hill or upstairs to be much more of an effort than it used to be. These symptoms show that working against the long-continued high intra-arterial pressure has told on the muscular wall of the heart and has diminished its elasticity, or, in simple words, that these patients are suffering from tired hearts.

In many people whose circulatory system is in this condition some valvular disease is apt to be set up at about the age of 60 years from the excessive strain on the valves caused by this long-continued high pressure—i.e., the valvular and muscular structures of the heart are apt to fail at about the same time. In these cases the mitral valve tends to become diseased and defective rather than the aortic, which is curious, as in cases of heart strain from external work the aortic valve usually gives first, whilst the mitral certainly suffers most frequently where the heart strain is due to high arterial tension, probably because it has to resist the greatest strain set up during the systole. These patients with chronic high arterial tension and tired hearts must necessarily have at all times a tendency towards a faulty distribution of their blood in the various vessels, and their veins must as a rule contain too much blood. If to this state of circulation any additional hindrance to the flow of blood should supervene, such as a quickly developing valvular lesion, a sudden contraction of the peripheral vessels from exposure to cold, &c., the embarrassed heart must become still more unequal to its work and a condition of more or less intense venous congestion inevitably be set up. If so, nature will probably seek relief by some hæmorrhage and this tendency to hæmorrhage will continue until the venous congestion be relieved.

Unfortunately, the hæmorrhage tends further to weaken the already feeble heart and lands the patient in a vicious circle where hæmorrhage is followed by hæmorrhage. In these cases one attack of epistaxis if not properly treated is generally followed by another and the patient may be reduced to a condition of extreme weakness. In my cases of epistaxis I had no history of any sudden muscular effort or strain, but rather the complaint of having had tiring days or feeling very cold and chilly. In the three cases where valvular disease was found as a new feature I believe the epistaxis occurred when the heart was at its weakest, before it had become accustomed to the altered conditions caused by the valvular lesion and before any compensatory hypertrophy was established.

I am, Sirs, yours faithfully,

Brechin-place, S.W., May 7th, 1901. GEORGE COATES.

## STERILISED MILK AND INFANT MORTALITY.

*To the Editors of* THE LANCET.

SIRS,—I am desirous of seeking information through the medium of THE LANCET with regard to certain details in the sterilisation or modification of milk for the purpose of reducing infantile mortality in manufacturing towns. By the

St. Helens scheme a basket is given to each customer containing nine bottles of sterilised, modified, or humanised milk, and with this a teat which can be fitted upon the end of the bottle. Directions are given to the mothers to feed the baby every two hours during the day and every four hours during the night, and to give the milk through the teat supplied. This seems easy and simple enough in theory. In practice, however, we have, in our endeavours to reduce infantile mortality, to cater for a class who through circumstances or indifference are unable to grasp the full object of the scheme. This class either refuse to use the milk at all or if they use it they pour the milk out of the sterilised bottle into an ordinary "titty bottle" with a long indiarubber tube or replace the teat with a long indiarubber tube of their own and thus save themselves both time and trouble. This materially alters the whole purport of the scheme, as the bottle or the tube used is generally in a state of sepsis, and the baby, instead of receiving pure wholesome milk, obtains it contaminated by admixture with the sour septic milk left from former feeds in the bottle or the tube, and this does not help to reduce infant mortality, but brings the sterilised milk scheme into disrepute.

Supposing the authority which supplies the milk were to obtain a quantity of these long flexible tubes and with every basket they supply, or in such cases as they consider it necessary or where the mothers prefer it, give one or two of these tubes (thoroughly cleansed), so that the child could be fed through this tube instead of the short teat, at the same time directions being given to the mothers that these tubes must be returned daily for cleansing. 1. Would this do away with the efficiency of the scheme? 2. Is it impossible to keep the long tubes clean? 3. Does the contact of sterilised milk with the length of indiarubber (thoroughly cleansed) contaminate the milk? 4. Is the objection to the long tube any other than that it is less likely to be thoroughly cleansed than a short one? 5. If the infant mortality of our manufacturing towns is due chiefly to the feeding of infants on improper food or feeding them out of dirty bottles and tubes, ought not authorities to try to render their scheme for educating and helping the mothers of such practical utility that even the most careless and indifferent could use the sterilised milk without feeling it to be an irksome burden? There is no doubt that the long flexible tube is used, and used to advantage, by many well-to-do people who keep it thoroughly clean, and I should like to know if the consensus of opinion amongst medical men is that milk must of necessity become contaminated the moment it passes through a length of indiarubber, and that the cleansing of this indiarubber tube is an impossibility.

I am, Sirs, yours faithfully,
E. A. CLARKE, M.R.C.S. Eng., L.S.A.

Dukinfield, May 14th, 1901.

## "LEGISLATION AGAINST NATIONAL INTEMPERANCE."

*To the Editors of* THE LANCET.

SIRS,—Dr. Walter Kidd is alarmed lest Dr. Reid's views should triumph on a foundation of Weissmannism. But it is one thing to assert that only inborn characters are transmitted, as Dr. Reid does, and another to attempt to explain how they are transmitted, as Weissmann has done. Nobody has spoken more emphatically than Dr. Reid on this subject. "Weissmann's speculations,"[1] he says, "obscure in themselves, made more obscure by his methods of demonstration, still more obscure by being constantly emended under the influence of destructive criticism, have drawn many students from the true path and by their difficulty have discouraged others." He speaks of Weissmann's views as "more or less metaphysical speculations concerning the continuity of the germ plasm and ids, idants, biophors, and so forth." Dr. Kidd's alarm would appear, therefore, to be groundless.

Dr. Clouston's remarks[2] concerning my criticisms are excellent in their brevity but deficient in argument of any kind; I will grant him his two irrelevant points cheerfully and humbly withal if he can destroy my criticisms or answer my challenge successfully.

I am, Sirs, yours faithfully,
H. LAING GORDON.

Honor Oak-road, S.E., May 12th, 1901.

[1] Scottish Medical and Surgical Journal for June, 1900, pp. 513 and 514.

[2] THE LANCET, April 27th, 1901.

## SWALLOWING ARTIFICIAL DENTURES.

*To the Editors of* THE LANCET.

SIRS,—Deaths from swallowing artificial dentures are becoming alarmingly frequent and the operations for the removal of these irregular and spiky objects are very often also fatal. The cause of this fatality is, of course, the hooks and bands which project from the plate, bury themselves in the tissues, and can only be dislodged by still further lacerations. It has struck me that in the case of vulcanite plates (most plates are now made with vulcanised caoutchouc as a base) the removal of the denture could often be facilitated by its being divided *in situ* and the parts removed separately. This could be done by splitting it with cutting forceps or dividing the vulcanite by fusing it with the electric cautery at a not very high heat. Metal plates could not be divided so easily, but it would be by no means impossible with strong shears.

I might also, in this connexion, mention that the swallowing of these dentures takes place as a rule during sleep. I do not wish to add another burden to the already over-laden general practitioner, but he would do well to warn any patient wearing a "partial" denture of the risk he runs, apart from hygienic considerations, by not removing his plate at night.—I am, Sirs, yours faithfully,

WM. RUSHTON, L.D.S. R.C.S. Eng.

Harley-street, W., May 7th, 1901.

## KING'S COLLEGE, LONDON, AND THE SOUTH AFRICAN WAR.

*To the Editors of* THE LANCET.

SIRS,—There is a large wish among old King's collegians and King's College school boys that the services of any of their number who have fallen in the war or who have survived the campaign in South Africa should have suitable commemoration. It will greatly facilitate matters, in view of an early meeting of sympathisers with the movement, if the names of any who are worthily entitled to inclusion in the roll of honour be immediately communicated. The medical representation must necessarily be a very large one and through the medium of THE LANCET we shall doubtless receive the names of a goodly number of King's College men, dead and alive.

I am, Sirs, yours faithfully,
J. TREEVE EDGCOME,
Associate of King's College, London.

Inner Temple, E.C., May 6th, 1901.

## SOUTH AFRICAN CIVIL SURGEONS' DINNER.

*To the Editors of* THE LANCET.

SIRS,—We have received so much support in reply to our letter published in THE LANCET of April 27th, p. 1236, that we feel justified in asking you to announce that the dinner will be held on Wednesday, June 5th, at the Hotel Cecil at 7.30 P.M. The price of the tickets will be 10*s.* 6*d.* each. We shall be glad to hear as soon as possible from any civil surgeons who may desire to be present. We shall be further obliged to you if you will kindly publish the following list of those who intend to be present: H. A. Ballance, A. A. Bowlby, J. Paul Bush, E. G. Calverley, J. Lenthal Cheatle, W. Watson Cheyne, John Chiene, A. Conan Doyle, H. W. Dudgeon, W. V. Eaves, A. D. Fripp, J. F. R. Gairdner, A. Granville, E. A. Houseman, Sir W. Mac Cormac (chairman), G. H. Makins, H. T. Mursell, T. H. Openshaw, F. O. Stoehr, C. Stonham, H. J. Starling, Sir W. Thomson, H. H. Tooth, F. E. Walker, and P. Wood.

We are, Sirs, yours faithfully,
C. GORDON WATSON,
FRANCIS E. FREMANTLE, } Acting Secretaries.

39, Moore-street, Lennox-gardens, S.W.

## AN APPEAL TO MEDICAL FREEMASONS.

*To the Editors of* THE LANCET.

SIRS,—I appeal to medical Freemasons to assist me in getting Reginald Everard Adolphe Webster, aged 10 years and three months, into the Royal Masonic Institution for Boys at the October election, which will be his first and

only chance. Bro. Dr. Webster, the father, was P.M., Lechmere Lodge No. 1874, and was until recently a member of the Addiscombe Lodge No. 1556. He died this year from acute pneumonia after a brief illness, leaving a widow and four children practically unprovided for. I would be glad to receive votes for any of the Masonic institutions.

I am, Sirs, yours faithfully,

HENRY G. THOMPSON, M.D. R.U.I.

110, Cannon-street, E.C., May, 1901.

## THE MEDICAL BENEVOLENT COLLEGE.

*To the Editors of* THE LANCET.

SIRS,—In common with the other governors of the Medical Benevolent College, Epsom, I have just received my annual voting-paper together with a recommended list of candidates drawn up by a committee of the Council, and it is to this document that I wish to call attention. There are 19 candidates for four vacancies for pensions, five being males and 14 females, but the recommendation committee, as in many former years, entirely ignores the men. Why, may I ask, is the broken-down practitioner to be always passed by in favour of a widow? This year's list is headed by the name of a practitioner, aged 69 years, which appears for the *ninth* year and has never yet had the recommendation of the committee though the applicant has scraped together 2021 votes, and has now died before the election! Then we have a practitioner of 79 applying for the *fifth* time and another of 79 for the *fourth* time. Surely the necessities of these gentlemen must equal those of widows of 62 and 64 who are recommended by the committee. I have no knowledge of the committee or their methods of investigation, but it seems odd to the outsider that they should recommend four candidates who have already secured 3558, 2756, 2770, and 3029 votes respectively, and who are therefore almost certain to secure their election without much assistance.

When I turn to the candidates for Foundation Scholarships I find the same tendency to recommend those candidates who have already secured large numbers of votes and therefore must have influential friends. I quite approve of supporting "last applications," but I think some of the seven cases selected are on the face of them open to criticism as compared with others who have not been so fortunate in securing votes. I need hardly say that I shall not support the list recommended.

I am, Sirs, yours faithfully,

AN OLD GOVERNOR.

## GERMAN SURGICAL CONGRESS.

(FROM OUR BERLIN CORRESPONDENT.)

(*Concluded from p. 1303.*)

*Extirpation of the Gasserian Ganglion.*

PROFESSOR KRAUSE (Berlin) gave an account of 25 operations performed by him for neuralgia of the trigeminal nerve and described the details of his method. In typical neuralgia the operation was successful in every instance; in other conditions, such as in hysteria, rheumatism, &c., it was useless. The operation was sometimes followed by slight sensory disturbances, such as sensations of pricking, &c.; paresis of the muscles of the eye and keratitis have also been observed. Some of the patients have remained well for between five and six years.

*Castration for Tuberculosis of the Testicles.*

Professor VON BRUNS (Tübingen) said that castration was not now performed so frequently as it used to be and double castration was avoided as much as possible because psychical troubles were said to follow this operation. There were also cases in which castration, in the full sense of the word, was not necessary, because sometimes, and especially when the disease was progressing but slowly, the removal of the tuberculous portions of the testicle or the epididymis was sufficient. Professor von Bruns had collected the statistics of the cases of this disease which had been met with at the Tübingen surgical clinic during the past 50 years. He was able to examine 112 cases, comprising 79 in which the disease was unilateral and 33 in which it was bilateral. The disease began nearly always at the epididymis; in 24 per cent. the testicle was affected with tuberculosis six months afterwards, and in 40 per cent. one year afterwards. In 26 per cent. the second testicle became tuberculous after the first had been removed. As to the results of unilateral castration he had found that 13 per cent. of the patients died, that in 15 per cent. of the cases tuberculosis of other organs occurred afterwards, that in 26 per cent. the other testicle became tuberculous, and that in 46 per cent. there was permanent cure. After bilateral castration as many as 56 per cent. of the patients were permanently cured. With regard to tuberculosis of the uropoietic system he stated that it was not more frequent in connexion with tuberculosis of the testicles than in connexion with tuberculosis of the other internal organs. His final conclusion was that the results of castration were not so bad as had been suggested.

Professor BAUMGARTEN (Tübingen) gave an account of his experiments on tuberculosis of the urogenital organs. He had tried to ascertain by experiments on animals whether it might be possible to produce tuberculosis of the bladder and kidney by injections of cultures of tubercle bacilli into the testicle. It had been proved that the tubercle bacilli never moved in a contrary direction to the circulation of the lymph but always with it. They had no power of motion of their own, but were carried along by the lymph-stream. Tuberculous disease might therefore reach the bladder from the testicles, but not *vice versâ*.

Professor BÜNGNER (Hanau) recommended "castratio alta." He removed not only the testicle, but also most of the vas deferens. The incision must thus be made rather large and the remainder of the vas deferens was removed by evulsion. It had never happened that after this operation tuberculosis extended to the peritoneum, as suggested by Dr. Schede.

Dr. SIMON (Heidelberg) reported 92 castrations for tuberculosis of the testicle, 66 per cent. of which resulted in cure. In 24 per cent. pulmonary tuberculosis was present, and it was found that the disease of the lungs was favourably influenced by the castration. Of 29 cases of bilateral castration eight patients died afterwards from tuberculosis and 21 were still alive. Psychical troubles occurred once.

*Effects of Modern Artillery and Rifle Fire.*

Surgeon-General W. SCHJERNING (Berlin) said that hitherto wounds from artillery fire were relatively rare, but henceforth they would be more frequent owing to the use of quick-firing guns and the greater precision of modern artillery. Wounds inflicted by shrapnel would be specially liable to infection by foreign bodies, such as portions of uniform being driven into the wound, so that 96 per cent. of those who were struck would be disabled. The same was the case in wounds from splinters of shells. In future wars probably more men would be killed at once on the battlefield by small calibre bullets, especially when the opponents came to closer quarters than had been the case in the South African war. Those who survived and were carried off the battlefield would, however, have a greater chance of recovery than had been the case in former wars, owing to the progress of operative surgery and the improved arrangements of the army medical service. This was especially evident in wounds of the abdominal organs, where laparotomy, when performed from 12 to 24 hours afterwards, would save a good many of the wounded.

Dr. TILLMANN (Greifswald), who had studied the specimens in the Army Medical Museum at Washington, U.S.A., stated that in former wars the wounds were not so severe as they were now. Nevertheless, the number of amputations was enormous because the great majority of wounds became infected.

Other papers read before the Congress dealt with the following subjects: Operations for Cleft Palate, by Professor VON EISELBERG (Vienna); the Parasites of Cancer, by Dr. NILS SJOBRING (Lund); Cerebral Surgery, by Professor HEIDENHAIN (Worms); Appendicitis, by Dr. REHN (Frankfort); and Contractures of the Knee-joint, by Dr. HEUSNER (Barmen). Professor KOCHER was elected President for the next meeting of the Congress.

NEW HOSPITAL AT NEWPORT (MON.).—The new hospital which has been erected at Newport (Mon.) will be formally opened by Lord Tredegar on August 5th. The institution, which will contain 84 beds and stands on an area of four and a half acres of land, has been built at a cost of about £30,000.

# THE ORGANISATION OF THE PROFESSION IN FRANCE.

(FROM OUR SPECIAL COMMISSIONER.)

## AFTER-EFFECTS OF THE INTERNATIONAL CONGRESS OF DEONTOLOGY.

THE International Congress of Medical Deontology, which was held in Paris in the month of July last year, has been bearing fruit. The desire for organisation has spread in the ranks of the medical profession in France just as it is spreading in England. On several occasions the medical organisations that exist among our near neighbours have been described in these columns, notably the Association Générale des Médecins de France, the Concours Médical, the Syndicat des Médecins de la Seine, l'Union des Syndicats Médicaux de France, &c. But these organisations, though accomplishing useful work in their respective spheres of action, should at least occasionally be grouped together for a common purpose. The remarkable paper on Medical Deontology read at the International Congress by Dr. Grasset of Montpellier led to the adoption by the entire Congress, at its final sitting, of the following resolution :—

The First International Congress of Professional Medicine and Deontology considering that, apart from the International Commission which has been constituted, it is also necessary to form in France a permanent national committee for the purpose of (1) preparing the national participation in the next International Congress, (2) of drawing up a project of a deontological code which shall be submitted for examination and discussion to all our colleagues, (3) of preparing a constitution and rules for the election of members to constitute the Superior Council of Professional Medicine which at the sitting of the 25th of July it was decided to create, (4) of fulfilling between the first and the second international congresses all the functions of this Superior Council, which shall be done by the Organising Committee of the first Congress till such time as the proposed Superior Council shall have been constituted, and (5) of convoking if necessary national congresses; and considering that it is necessary to designate at once this national committee (the postponement of this would mean the non-execution of the decision adopted), decides at its general and final sitting of July 27th, 1900—

That this Committee shall from now and up to the next Congress be constituted by the bureau (Organising Committee) of the First Congress of Professional Medicine and Deontology, the bureau of l'Union des Syndicats Médicaux de France, the bureau of the Association Générale des Médecins de France, the bureau of the Syndicat des Médecins de la Seine, and the bureau of the Conseil Général des Sociétés Médicales des Arrondissements de Paris, the bureaux being composed for each of these associations of the president, vice-president, general secretary, and treasurer. This Committee may add to its number.

The above resolution constitutes the first attempt to federate all the medical organisations of France, and the representatives of these various societies met last Easter at the Paris Faculty of Medicine. It soon became evident, however, that in spite of the resolution considerable difference of opinion prevailed. Several of the medical men present manifested a strong preference for the constitution of medical chambers after the model of those that exist in Germany and Austria. The reports as to medical chambers that had been given at the International Congress had not, however, been very favourable. The fact that every medical practitioner would be compelled by law to subscribe to, and to obey the rules and discipline of, medical chambers had its advantages; but, on the other hand, the dependence upon the government involved would mar freedom of action and would prevent the profession from attending to many questions that might be of considerable importance. Nevertheless, it was maintained that many advantages had resulted from the constitution of medical chambers in Germany and Austria which had not been mentioned at the International Congress. After some considerable discussion the matter, however, was allowed to drop and the attempt to revise the decision adopted at the Congress collapsed. On the other hand, it was felt that the Committee actually constituted by the resolution quoted above was lacking in authority and it was determined that some effort should be made to obtain some recognition and sanction from the Government. For this purpose the President of the Committee, Dr. L. Lereboullet, proceeded to the Ministry of the Interior, where M. Henri Monod holds a post similar to that of the chief of the medical department at the British Local Government Board. M. Monod, however, when asked what would be the attitude of the French Government, held out no encouragement. He seemed to fear that a clash might occur between the organised members of the medical profession and the medical men in the employ of the Public Assistance Service whose position bears some analogy to that of the medical men who in England hold official posts under the Poor-law. M. Monod did not relish the idea of the creation of a Superior Council of the medical profession with the aid of, and under the patronage of, the Government. He thought that such an organisation should be independent of all Government authority and control.

Dr. Lereboullet then proceeded to the Ministry of Public Instruction, which, as the controlling authority over the universities and faculties of medicine, is also concerned in the interests of the medical profession. Here M. Liard, the Director of the Secondary Education Department, expressed much sympathy. He readily recognised, and he emphasised the fact, that the medical profession was in serious difficulties. Indeed, he went so far as to say that in his opinion a terrible calamity was at hand. An unprecedented number of medical students had entered at the Faculties of Montpellier, Toulouse, and Bordeaux. Any number of small farmers, petty tradesmen, and others who were able to scrape a little money together were now sending their sons to the universities so as to make medical men of them. There would be a terrible glut in the urban supply. There were not too many medical men in France, but all the young men gravitated to the large centres and especially to the northern towns. For small rural practices there was still need of medical men, but the newly-qualified practitioner was generally too ambitious to accept such a modest position. Thus the glut was due to bad distribution rather than to an over-supply of medical men. M. Liard was of opinion that it would be a good thing if a law were enacted constituting some sort of institution that could act as a governing body for the entire medical profession. There is no General Medical Council in France similar to that which exists in England and there is neither Register nor authority willing or able to remove from the profession an unworthy practitioner. The Superior Council of Hygiene is supposed to possess this power, but it has never exercised such a function. No proposal has even been made to this body to deal with professional questions; it has never attempted to do more than to advise the Government in matters relating to the preservation of public health.

Finally, Dr. Lereboullet went to the Ministry of Commerce and Industry. Here he was most cordially received. M. Millerand said that he would favour the creation of a medical council that would have for its mission the studying of all questions of social protection. First would come the protection of the economical interests of the medical men themselves, and after that their connexion with other corporations, collectivities, trade organisations, &c. This somewhat alarmed some of the medical men. To their fancy these suggestions seemed not unconnected with the principles of State socialism, they feared the introduction of politics in their midst and, when gathered together to hear the results of these various negotiations, a large majority voted that no further effort should be made in this direction. It is also necessary to recognise that the desire to create a central and supreme authority is not viewed with absolute favour. Theoretically, all must acknowledge that one great powerful organisation is preferable to many weak bodies, but in practice each collectivity has an individuality of its own and does not always relish a process of absorption, and some of those who have considered themselves as chiefs do not always care to become subordinates. At present the tie of union is so slender that each particular society is able to continue its own individual life without check, control, or interference, and it will need some sharp necessity to make these different groups or organisations abandon their independence. Yet among the members of the profession at large, and especially among those who do not belong to any special organisation, the need of a central and supreme body is widely felt. This is proved by the fact that though such a body can hardly be said to exist hundreds of medical men have acted as if it was actually not only in being but possessed of very extensive powers. No sooner was it generally known that, by virtue of the Grasset resolution, the Organising Committee of the Deontological Congress had become the Permanent National Committee of Professional Medicine than innumerable letters came pouring upon the general secretary, Dr. Jules Glover. Though possessing no power to act, no secretaries, and no funds to help him to carry on so vast a correspondence, Dr. Jules Glover has received as many as 30 letters in one single day,

coming from all parts of France or the colonies and some even from abroad, and raising complex questions or making extraordinary requests. Sometimes it is a medical man who is losing his practice through the competition of a quack, another has a quarrel with a fellow practitioner, not a few want to change their practices, to remove to some more suitable or agreeable locality, or to prevent some newcomer from establishing himself in their immediate neighbourhoods. Then there are endless disputes with friendly societies, insurance companies, colliery or factory owners, &c. Dr. Glover does not know what to do with this vast correspondence, and sometimes he calls on the Dean of the Faculty, Dr. Brouardel, and lays before him a formidable bundle of letters. Dr. Brouardel suggests that Dr. Glover should as yet do nothing, for no one has the means or the power to take action at this stage. But all this proves that there is a real need of some better organisation and of some sort of council, committee, or professional tribunal to which many of the questions raised by the correspondents could be referred with the hope of obtaining a solution. In his replies to these letters Dr. Glover refers his correspondents to such societies as exist and that deal with the questions raised, but in many cases there are no societies to which such reference can be made.

As matters now stand there is some question of creating an Order of Doctors. Presumably it will be an honour to belong to this order, and those on whom this distinction is conferred will be expected to observe those ethical or deontological rules which after all should be carried into practice by every member of the profession. It cannot be said that certain medical men are bound by a code of honour which other practitioners need not observe. Every good rule should apply equally to all. This question of an "Order" seems to be but playing with words. Organisation and discipline to carry out a definite set of principles are greatly needed and it does not much matter under what name this end is attained. There is now the beginning, though but a small beginning, of the necessary and centralised organisation. The Permanent National Committee of Professional Medicine has arranged to meet at least twice a year at the Paris Faculty of Medicine. Here will be centralised the questions that have arisen in the various medical organisations that are represented on this National Committee. It remains for the medical practitioners, for the rank and file of the profession, to enrol themselves in their local medical syndicates or unions and thus to render the National Committee a truly representative institution. At present it has only a moral influence. It has not even constituted a committee or tribunal of discipline, but it has appointed a sub-committee to draw up the draft of a code of deontology. As is usual, there is more said about the grievances and the rights of medical men than about their duties, but this will come in due time. The work of organisation is slow but it is better that a small body of men who are all absolutely unanimous should work the object in view than a crowd lacking in cohesion. When the profession, by the steadily pursued work of organisation and the federation of organisations, has found the means of articulating and rendering its desires manifest what legal sanction may be needed will then be attainable. In any case the First International Congress of Medical Deontology has not been held in vain, for it has brought into existence the Permanent National Committee of Professional Medicine, and that the Congress itself was a success is still further proved by the report which this committee has just issued. According to this statement, 55 000 circulars were sent out for the International Congress. These were printed and posted by the French Government free of cost. The subscriptions or entrance fees of the members of the Congress amounted to 9995 francs. The Paris Municipal Council gave the Congress a subvention of 3000 francs, and with some small donations and the sale of reports of the proceedings to persons who were not members of the Congress the total receipts amounted to 13,349 francs, or £534. The expenses, including £72 for the banquet, amounted to £442, so that there remains a balance of £92 in hand to help in the organising of the next International Congress which will be held at Brussels in 1903.

For this next International Congress each nationality should have an organising committee of five members with a representative who resides in Paris, and these committees of patronage have already been appointed in the United States, in Belgium, in Holland, and in Spain. These national committees will endeavour to promote the interests of the Congress and will urge societies to send representatives; they will have a voice in the preparation of the programme. The permanent committee of the first International Congress has its headquarters in Paris, with Dr. Jules Glover, 23, rue de la Bienfaisance, for its general secretary. This body is taking the initiative for the appointment by each nationality of a local national committee of patronage. Someone must do this work and the only committee in existence and able to meet is the committee which organised the first Congress when it was held in Paris. It therefore at present serves as the international connecting link and will continue to do so until the Congress meets again in Belgium. This work will then probably be taken up by the Belgian committee upon whom will fall the organisation of the Second International Congress to be held in Brussels in 1903.

Paris, May 4th.

## NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

*The Plague Epidemic.—The Pasteur Institute at Kasauli.—Laboratories for Experimental Research.*

THE intensity of the outburst of plague in Bengal is at last abating, although the disease continues in other parts of India without much change. For the whole of India there were 8429 deaths from plague last week, as compared with 11,616 in the previous week. In Bengal the figures dropped from 7881 to 4735. The North-West Provinces report 929 deaths as against 909, the Punjab 393 as against 301, Karachi 219 as against 176, and Bombay City 714 as against 707. Twenty-five deaths are reported from Kashmir. In Calcutta the outbreak is rapidly going down—the plague mortality having fallen from 859 to 548. The returns show that there have been 6212 deaths from plague in this city since the beginning of the year. There is a slight rise in the plague figures for Bombay, but these figures are utterly untrustworthy. Notwithstanding the proved value of inoculation for plague the prophylactic is being pushed in a half-hearted sort of way and in many places it receives little encouragement from the higher authorities. The issue of doses from the Research Laboratory, Bombay, the week before last was 10,020 to Bangah in the Jullunder district of the Punjab, 4000 to Jullunder, 2000 to Gurdaspur, Agra, and Karachi, 1182 to Gaya, 1206 to Kashmir, and 1000 to Falna in Marwar. Very few inoculations are being done in Bombay city and practically none at all in Calcutta.

The work done in the Pasteur Institute at Kasauli from its opening in August last up to March 8th included the treatment of 173 patients. The lists are made up as follows: British officers, 15; British soldiers, 45; native officers, 1; soldiers, 9; European civilians, 27; soldiers' children, 3; natives, 73. The success so far in the treatment of these cases equals that of the Pasteur Institute in Paris and the institute will prove a pecuniary gain to the Government in the long run. What are now wanted are well-equipped research laboratories in Calcutta and Bombay, where original researches should be made by the officers in charge and could also be made by private investigators. The field for original work in bacteriology and experimental pathology in India is enormous, but with the exception of one or two small efforts at cultivation it is all running to waste. What scientific work do we hear of in the treatment of plague, of cholera, of relapsing fever, and of the anomalous fevers which men are so fond of writing about? Can it be said that we have advanced a single step in the treatment of these diseases during the past four years? And why? Because there is no organised experimental research. Take Bengal, the reputed home of cholera. Is there a single man deputed to work upon and to investigate this disease? Cholera inoculation has got to a certain stage, but it gets no further, and there is absolutely no scientific treatment after the symptoms of the disease have once commenced. What have the scattered workers done in plague? The treatment is still stimulants, strychnine, and digitalis, and the mortality is still nearly 80 per cent. Nothing can be done without experimental research and laboratories cannot be supported except by Government or by public bodies. The men must be found to be put upon the

work, it is utterly impossible for it to be taken up as a hobby.

April 30th.

*The Decline of the Plague Epidemic.—The Famine.—The American "Diploma Mill" and Indian Victims.—Return of Hospital Ships from China.*

A further large reduction in plague mortality occurred last week. The total deaths throughout India were 6304 as compared with 8429 for the previous week. The decline was general with the exception of the Punjab where the deaths rose from 393 to 518. The most marked fall was noticeable in Bengal where the deaths fell from 4735 to 3258. The outbreak in Calcutta is rapidly subsiding, the deaths from plague having declined from 548 to 389, and the general mortality of the city having returned nearly to normal. The Saran, Gaya, and Patna districts, recently suffering so severely, return much reduced figures, but in the outlying villages of the Saran and Patna districts the disease is still very virulent. In the North-West Provinces there has been a decline from 929 to 662 and in Bombay city from 714 to 602. In Calcutta the general mortality keeps very high, the last published weekly total giving 1667 deaths—equivalent to an annual death-rate of 109·62 per 1000. The city of Karachi is still severely afflicted with the pestilence, but an improvement can be calculated upon very shortly. The Jumna district of Kashmir returned last week 25 deaths.

It is, perhaps, hardly realised in England that the famine still continues. The returns for last week show over 250,000 persons on relief in British territory, nearly all of whom are in the Bombay Presidency. Portions of the Hyderabad State and the Baroda State are also still famine-stricken.

The Government have published certain extracts from American papers recording the conviction of the two Armstrongs who conducted a "diploma mill" and sent many of their "diplomas" to India. Several native practitioners were deluded by these rogues, who are said to have been turning out graduates at the rate of 1000 a year. First they styled themselves the Illinois Health University. When this was stopped the Independent Medical College was started, and when this was annulled the Metropolitan Medical College came into existence. It is highly satisfactory to hear that imprisonment for one year has been imposed on James Armstrong, the so-called President, and that though the sentences have been deferred on his coadjutors they are also likely to be punished. This is a good example of the necessity for some form of registration in India. At present any quack is free to assume any titles he chooses and to delude the public as to the possession of medical knowledge. The recognised graduates of colleges in India should be separately registered, and it might be possible also officially to acknowledge the native hakims and vaids who practise with native drugs and methods of treatment.

The hospital ship *Carthage* has arrived from China, bringing troops collected from Peking, Tientsin, Taku, and Shanghai Kwan. She brought 225 native rank and file and 157 followers. There were also 20 British non-commissioned officers and men and a few commissioned officers. The hospital ship *Gwalior* is expected shortly with sick and invalids. Arrangements are now being made in Calcutta to fit up transports to bring back the Imperial service troops—viz., the Jodhpore Lancers and the Bikaneer and Ulwar regiments.

April 25th.

## LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

*A New Anti-malaria Experiment: a Munificent Offer.*

THE theory of the connexion between mosquitoes and malarial fever will shortly be put to a very practical test. If the theory strongly held by Major Ronald Ross, late I.M.S., the director of the Liverpool School of Tropical Medicine, and others that the anopheles is the bearer of the germs of malarial fever be a correct one, it follows that the extirpation, in certain districts at least, of the noxious insect must tend to minimise the danger of malarial infection. Doubtless to many it would appear to be utopian to attempt a task so apparently hopeless; nevertheless, given the means the experiment is worthy of trial. With this laudable object in view, and with great munificence, a Glasgow citizen who desires to remain anonymous has placed at Major Ross's disposal a sum of money sufficient to defray the expense of one year's trial of the measure in some malarious town or district in West Africa. To carry out this object a staff of workers with all necessary appliances will shortly be despatched to Sierra Leone to assist in the extirpation of the mosquito. The plan of operation will be to destroy the adult insects which are found in the houses and the larvæ which are deposited in puddles or vessels of water outside. The selection of the town where the experiment will be tried will largely depend upon the degree of coöperation afforded by local authorities. Should the experiments prove efficacious an incentive will have been given to local authorities to induce them to adopt similar measures in other malarious towns. The Liverpool School of Tropical Medicine is also to be congratulated upon Major Ross's recent nomination as a Fellow of the Royal Society.

*The Population of the City: A Disputed Death-rate.*

Dr. E. W. Hope, the medical officer of health, has persistently held that the percentage of deaths to the population was based on an erroneous estimate of the population of the city. It would now appear that he had good reason for disputing the Registrar-General's returns which, as he pointed out at the last meeting of the Health Committee, were 50,000 below the actual figures as shown by the recent census returns. The average death-rate in the city during the past five years was now shown to be only 23·1 per 1000 instead of 25 per 1000, as computed on the erroneous estimate of population. The population of Liverpool has now increased to 685,000, a considerable advance on the census of 1891.

*The Progress of Cremation in Liverpool.*

Cremation makes slow progress in Liverpool. During the year 1900 40 bodies were cremated, bringing the total number cremated since the opening of the crematorium in 1895 to 102.

*A New Departure at the Toxteth Workhouse.*

Miss Agnes F. Blackadder, M.A., M.D. Glasg., has been appointed to the post of assistant medical officer to the Toxteth Workhouse. The board were somewhat divided over the appointment, but as there were four lady members present (naturally in sympathy with their sex) the young Scotch lady carried the day. It does not appear that any male candidate applied for the post.

*University College, Liverpool: Meeting of the Court of Governors.*

Dr. T. R. Bradshaw, the recently elected honorary physician to the Royal Infirmary, has been appointed a lecturer on clinical medicine in University College. The court of governors of the college at their meeting on May 11th unanimously agreed that the time had come when Liverpool should possess a university of its own and gave some cogent reasons for the conversion of University College into the full-blown University of Liverpool.

May 14th.

## WALES AND WESTERN COUNTIES

(FROM OUR OWN CORRESPONDENT.)

*The Census Returns and Revised Death-rates.*

Now that the census returns of the county boroughs have been published it is possible to calculate the extent to which the birth-rates and death-rates in these towns require readjustment. The population of Bristol is barely 1000 above the estimate of the Registrar-General, so that the vital statistics based upon that estimate are not appreciably affected. The medical officer of health of Bath estimated the population of that city in the middle of 1900 at 52 600 and the death-rate for the year at 16 per 1000, but the actual population at the end of June, 1900 is found to have been 49,600 and the true death-rate 16·9 per 1000. The Newport population was over-estimated by the medical officer of health to the extent of about 10 000. The revised returns give the population of this seaport on April 1st last as 67.279; in 1891 the population was 54,707. The actual population of Swansea at Midsummer, 1900, was more than 11,000 below the 105,472 upon which the returns

for 1900 were calculated, and the birth-rate is consequently raised from 26·7 to 29·7 per 1000 and the death-rate increased from 17·1 to 19·3 per 1000. At Cardiff, however, there is the greatest disparity between the estimate of the Registrar-General and the actual population as shown by the census returns. At the middle of 1900 the official estimate of the population was 194 247, or 35,000 more than the real number as disclosed by the census. The true birth-rate in 1900 was therefore 32·2 per 1000 and not 26 8, and the true death-rate was 16·5 and not 13 8 per 1000 as calculated from the higher estimate. In the last decade the population of Cardiff increased by 33,000 and there were 10,000 houses and shops erected during the same period. In each of the two previous decades the increase was about 45,000. Those interested in the matter quite expected to find that the Registrar-General had over-estimated the population, for the low birth-rates recorded during the past few years were exceptional, and it was known that there was a very large number of unoccupied houses in the town, but it was hardly anticipated that the discrepancy would have been as great as that revealed by the census returns. In his report for the year 1899 Dr. Edward Walford stated that with a view of ascertaining as far as possible the extent of the error in the official estimate of the population an inspection of the district is made in the month of June in each year in order to record the number of inhabited houses in the borough, and an estimate of the population is then made by multiplying this number by the average number of inmates in each house as found at the previous census. In 1899 this local estimate was only 5000 below the estimate of the Registrar-General and affected the death-rate to the extent of only 0 5 per 1000. It would thus appear that the average number of persons per house, which in 1891 was 6 3, must at the present time be very much less.

*Knackers' Yards.*

An account has already appeared in THE LANCET[1] of the committal to prison of a butcher trading at Taff's Well, Caerphilly, for selling horseflesh as human food without indicating that it was horseflesh. The meat was bought at twopence a pound from a well-known knacker who carries on a large trade in the colliery districts surrounding Pontypridd. This man was convicted at the Pontypridd police-court on May 3rd and fined the maximum penalty of £20 for not complying with section 1 of the Sale of Horseflesh Regulation Act, 1889, which requires those who sell horseflesh for human food to place in a conspicuous place upon their premises and so as to be visible day and night a suitable sign indicating that horseflesh is sold there. Until Nov. 1st, 1894, knackers' yards were licensed and regulated by the court of quarter sessions and after that date, outside London, by the local sanitary authorities. The Towns Improvement Clauses Act, 1847, is the statute principally concerned with these premises, but there are several older Acts still unrepealed which contain provisions relating to horse-slaughtering. The first purpose of these Acts was no doubt to prevent horse- and cattle-stealing, but there is no reason why they should not be used on occasion to prevent the distribution for human consumption of unsound meat. The vestry still has the power, and indeed is under an obligation, to appoint annually an inspector of houses and places for slaughtering horses. A person convicted under the provisions of one of these Acts may be punished, not only by the cancellation of his licence, by fine, or by imprisonment, but by whipping.

*Cardiff Infirmary.*

As already stated in THE LANCET[2] Lady Windsor, Lady Aberdare, Mrs. Mackintosh of Mackintosh, and Miss Talbot recently appealed to the ladies of Glamorganshire for sufficient funds to enable the number of beds in the Cardiff Infirmary at the disposal of Dr. John D. Williams, the gynæcological surgeon, to be increased. The response to the appeal has been very gratifying and is such as to justify the opening of a ward with 10 beds which it is proposed entirely to refurnish.

*Colliery Surgeons.*

Dr. C. E. Cochrane was on May 10th elected by a majority of 900 votes surgeon to Messrs. Insole's colliery at Cymmer in the Rhondda Valley. Dr. Cochrane is a son-in-law of the late Mr. Ivor A. Lewis who had been surgeon to the colliery almost from the sinking of the first pit. With one exception all the colliery surgeons in the Rhondda and Pontypridd districts are paid a poundage of threepence upon the earnings of the colliers. The system which has been adopted in some of the Monmouthshire coalfields, notably in the Rhymney Valley, of paying a fixed salary, has never found much favour in the Rhondda Valley where the workmen appear to be alive to the fact that although in good times the surgeon is well paid, yet in bad times he is very inadequately remunerated and during a strike receives actually no payment at all but must still remain in attendance upon those requiring his services. The one exception mentioned above is in the case of the Ferndale collieries, to which for many years Mr. T. W. Parry has been surgeon. The work-people employed at this and at the adjoining collieries paid a poundage of only twopence until the year 1899, when it was raised to threepence at all the collieries except those at Ferndale. Mr. Parry thereupon gave notice that he would decline to attend any families from which the higher sum was not paid. A large proportion of the workmen paid the threepence, but a section of them formed themselves into a committee, made a levy, and engaged a surgeon at a fixed salary, the committee undertaking to pay the surgery expenses, &c. Several abortive attempts have been made to compel all the workmen to subscribe to the funds of this committee, but at present a majority of the colliers allow the deduction of threepence to be made for Mr. Parry. It is not without interest to remark that the leaders and the more intelligent among the men realise that when they themselves claim to be paid the "standard" rate of wages the same principle must be allowed to all paid workers, whether bishops or bootblacks, and that colliery surgeons have a perfect right to demand to be paid at their "standard" rate.

*High Death-rate in Breconshire.*

The death-rate recorded in the rural district of Hay in Breconshire, where there is a population of 3200 persons, was 19·2 per 1000 and the infantile mortality was equal to 205 per 1000 births. There were only 16 more births than deaths during the year in this district.

*Medical Certificates.*

At the April sitting of the Aberdare County Court Judge Gwilym Williams animadverted upon the careless manner in which certificates of inability to work were given by medical men to their patients, and said that in future he should be very chary of accepting such certificates except from those medical men who were personally known to him. These remarks were called forth on the presentation of a medical certificate to the effect that a collier against whom an execution summons had been applied for was too ill to work. It was stated that for nearly a year similar certificates had been lodged in court and execution had in consequence been deferred, whereas the man had been at work nearly the whole of the time. It appears that this carelessness is not confined to Aberdare, for at the Newport County Court held on May 10th Judge Owen said that as he was getting so many untrue medical certificates he would have to refuse to recognise them.

*Bristol Medical Dramatic Club.*

The Bristol Medical Dramatic Club gave a series of performances last week at the All Saints' Hall, Clifton, in aid of the funds of the Bristol Royal Infirmary and the Bristol General Hospital. The pieces selected were *The Man in the Street* and *The Parvenu*. The performances were very successful, and it is hoped that a substantial sum will be raised for the institutions.

May 14th.

## SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

*Edinburgh University.*

AT the half-yearly meeting of the General Council held on May 1st the Finance Committee reported that the matriculations of medical students which were 2003 in the session 1889–90 had been declining ever since, and in the session 1899–1900 were only 1368. It was suggested that this result might be due in part to the competition of other schools and in part to the increasing amount of study required. The subject has naturally aroused much interest in Edinburgh and is being discussed in the newspapers. Dr. Ernest E. Greville, writing in the *Edinburgh Evening News* of May 11th,

[1] THE LANCET, April 27th, 1901, p. 1219.
[2] THE LANCET, March 30th, 1901, p. 929.

complains that owing to the operation of the "fee fund" an undue proportion of the fees paid by medical students is devoted to purposes other than medical instruction—namely, in making up the salaries of 22 professors who in other faculties have not sufficient students to cover expenses. He also complains of the professors' duties being in part performed by assistants and of the number of lectures that students have to attend encroaching on their practical work.

*Glasgow University.*

The University Court at its meeting on May 9th was again occupied with the question of finance. Dr. McVail's criticism at a former meeting of the arrangements under which the class fees of women students at Queen Margaret College are paid into the general fee fund was met by a reference of the whole question to a special sub-committee. The report of this sub-committee supported the existing arrangements, and its adoption was moved by Professor Stewart. Dr. McVail, however, remained unconvinced. He argued that the fees paid by the women students should be directly employed in remunerating their teachers. Paid into the fee fund, which was in the first place absorbed in meeting the normal salaries of the professors, it might well happen that the money would find its way into the pockets of those who were in no way concerned with the teaching of women, whilst the remuneration of the lecturers to women came as a charge on the general university fund. The arrangement, he said, was wrong in principle and bad in practice, and was one never contemplated by the ordinances. On a vote being taken Dr. McVail found only one supporter, whilst seven members voted for the adoption of the report.—The committee appointed to consider the proposal for the establishment of a summer session in Arts recommended the Court to approve generally the scheme advised by the Arts Faculty and to send on the proposals to the other Scottish universities for their opinion. This report was unanimously agreed to.—The arrangements in connexion with the celebration of the ninth jubilee in June are exciting, as was to be expected, much enthusiasm among the undergraduates, who are heartily coöperating with the plans of the Court and Senate and who intend, in addition, to have some festivities of their own. Student representatives have been invited from the principal universities all the world over, and it is proposed to entertain the foreign visitors at a grand gaudeamus to be held in the Union on June 12th. The musical arrangements for this are in the hands of a committee presided over by Professor J. Glaister. On the evening of the 14th a university ball is to be held, and during the four days over which the celebrations are to extend the university athletic club is to hold the annual athletic sports and an athletic inter-university contest is to take place.—The following appointments to examinerships have been made by the University Court: William Hunter, M.D. Edin., F.R.C.P. Lond., to examine in medicine and clinical medicine; Albert Carless, B.S. Lond., F.R.C.S. Eng., to examine in surgery and clinical surgery. Each appointment is for four years, dating from Jan 1st, 1901.

*The Epidemic of Small-pox in Glasgow.*

The last fortnightly report shows a register of 28 new cases of small-pox as compared with 92 new cases during the preceding fortnight; the deaths during these two periods were six and 16 respectively. The totals since the beginning of the outbreak are: admissions 1817, deaths 230. The number of those in hospital is 75. At a meeting of the Finance Committee of the corporation on May 10th the treasurer asked for instructions regarding the manner in which the extraordinary expenditure arising out of the outbreaks of bubonic plague and small-pox should be dealt with. After consideration the committee agreed to recommend that such expenditure, so far as it was in excess of the revenue of the year, should to the extent of one-sixth be included in the accounts of the year and carried forward as a deficit against the revenue of next year, and that the remaining five-sixths should be charged in equal proportions against the revenue of the next year and the four succeeding years, thus debiting next year (1901–2) with two-sixths of the entire deficiency and each of the four following years with one-sixth. The recommendation was discussed by the town council on May 13th and was adopted. The total expenditure, it is estimated, will be between £40,000 and £48,000.

*Glasgow Royal Infirmary.*

At a meeting of the medical and surgical staff held on May 10th Mr. Hugh Brown was presented with an address on the occasion of his retiring from the chairmanship of the house committee which he has held for a term of 16 years. The presentation was made by the senior physician, Dr. John Dougall, and the senior surgeon, Mr. Henry E. Clark, C.M.G. In the course of his reply Mr. Brown referred to the proposed scheme of reconstruction and spoke hopefully of its speedy accomplishment. In regard to the site he was convinced that no better position could be found, unless the managers were prepared to purchase an estate on the outskirts of the city, and this would mean the removal of the infirmary from the centre of the busy manufacturing district for the surgical emergencies of which some such institution was a necessity. The chairman of the meeting was Mr. J. D. Hedderwick who succeeds Mr. Brown as the chairman of the house committee. Two important professional positions in connexion with the infirmary are vacant—viz., a physicianship, vacant by the retirement of Dr Dougall, and the Professorship of Medicine in St. Mungo's College.

*Bequests to Glasgow Institutions.*

The trustees of the late Mr. Adam Teacher, acting in accordance with the will of that gentleman, have announced the following bequests: Glasgow Royal Infirmary, £6500; Western Infirmary, £4800; Victoria Infirmary, £1700; Royal Hospital for Sick Children, and Glasgow Eye Infirmary, each £1200; Maternity Hospital, £800; Central Dispensary, Asylum for the Blind, Deaf and Dumb Institution, Lock Hospital, Cancer Hospital, each £600; Dental Hospital, £500; Samaritan Hospital, Ear Hospital and Dispensary, Hospital for Skin Diseases, and each of the Dorcas Societies of the three general infirmaries, each £300. Various convalescent homes and other charities also receive legacies. The total sum distributed amounts to £36,434.

*Donations to the Paisley Hospital.*

The directors of the Royal Alexandra Infirmary have received the following donations: (1) an additional donation of £1000 from Mrs. Stewart Clark to the fund of £5000 instituted by her for the relief of incurables; (2) a sum of £736 19*s.* from Mr. James Coats to wipe out the deficit on the ordinary income and expenditure account of Dec. 31st last; and (3) a donation of £5000 from Mr. James Coats towards the reduction of the building fund debt.

May 14th.

## IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

*National Maternity Hospital, Hollis-street, Dublin.*

THE annual meeting of the friends and supporters of this hospital took place on May 10th in the Mansion House. On the motion of the Right Hon. the Lord Mayor the chair was taken by His Grace the Most Reverend Dr. Walsh, Roman Catholic Archbishop of Dublin. A very satisfactory report of the committee of the hospital was read by Mr. Andrew Horne, F.R.C.P. Irel., after which addresses were delivered by the Archbishop, Mr. Brereton Barry, K.C., Mr. Bodkin, K.C., the Lord Mayor, Lieutenant-Colonel Ross of Bladensburg, C.B., D.L., and others.

*Royal Medical Benevolent Fund Society of Ireland.*

At the annual meeting of the subscribers to the Belfast or county Antrim branch of this society held in the Museum, Belfast, on May 8th, the President (Professor W. Whitla) being in the chair, it was reported that £190 17*s.* 6*d.* (as compared with £75 1*s.* 6*d.* last year) had been contributed during the year—an increase due to the exertions of the President. There were 146 members of the medical profession in Belfast and 32 in the county districts who had subscribed, as against 67 and 20 respectively in the previous year. A sum of £180 7*s.* 7*d.*, the largest contribution since 1876, had been remitted to the parent society in Dublin. 44 practitioners in Belfast and many of the country members of the profession did not subscribe. On the other hand, the students of Queen's College have subscribed. Professor Whitla was re-elected President for the ensuing year, Dr. H. L. McKisack secretary, Dr. R. Purdon treasurer, and an ordinary committee and a collection committee were appointed.

*The Ulster Medical Society.*

The seventh meeting of the Ulster Medical Society was held in the Belfast Museum on May 9th, Dr. W. A. McKeown, ex-President, being in the chair.—Dr. A. Fullerton showed

a case of marked Scoliosis in a boy, aged 13 years, and a case of Congenital Absence of the Radius and Thumb, with a radiogram of the same.—Mr. A. B. Mitchell showed (1) a patient on whom he had operated for Fractured Patella, with radiograms of the case taken shortly after the accident, after two weeks' treatment by extension, and after operation; (2) a simple form of Jacket for Spinal Caries; and (3) radiograms of a case of Congenital Absence of the Radius and of a case of Fracture of the Os Calcis treated by wiring.—Professor T. Sinclair showed radiograms of Fractures involving the Knee-joint treated by wire suturing.—Dr. Fullerton read a paper on "Tuberculous Lymphatic Glands."—Dr. W. Calwell showed a specimen of Malignant Disease of the Pancreas. He also exhibited a case of Tuberculous Skin Disease, and a boy with an Enlarged Spleen.—Interesting discussions followed these communications, some of the speakers limiting the wiring of a fractured patella to a separation of the fragments of more than three-quarters of an inch, while others thought the proper treatment of all fractures about joints was to wire the fragments.

*Armagh County Asylum.*

At the monthly meeting of the governors of the Armagh Asylum, held on May 13th, the half-yearly report of the auditor of the Irish Local Government Board was submitted which stated, among other matters, that the accounts for the half year were in a most unsatisfactory condition. There were no financial entries in the minute-book, and the financial statement book of receipts had not been confirmed by the committee for any month. No finance committee had been appointed and the bills bore no indication of having been examined or passed. Three of the treasurer's authorities were incorrect and the amounts paid by the treasurer in July and October exceeded the authorised totals by £100 and £7 respectively. The Lord Lieutenant's sanction to the increase of salary voted to the assistant medical officer had not been obtained. The amounts due by the late clerk, who had absconded, were £56 9*s.* 7*d.*, and it was presumed that immediate steps would be taken to recover the sum from his sureties. The committee had evidently disregarded the suggestion of the auditor to discontinue the monthly luncheon, and there was, therefore, no course open to him but to surcharge the amounts thus illegally placed upon the ratepayers. It was impossible to ascertain the full amount, but £5 17*s.* 8*d.*, the amount paid for wine and extras, would be disallowed. It was but right to say that many members of the committee were opposed to the luncheons and did not attend them. Many other irregularities were mentioned and the report went on to say that for this state of affairs the responsibility rested not only on the medical superintendent but also on the committee, and it would be necessary in future that the former should exercise the intelligent supervision over the books which was required by the regulations of the asylum accounts order, and that the committee should, as a committee or as a body, satisfy themselves that the officers were discharging the duties for which they were paid.

*Small-pox in Belfast.*

Up to the present time there have been five cases of small-pox in Belfast with one death and one suspected case.

May 14th.

## PARIS.

(FROM OUR OWN CORRESPONDENT.)

*Sanatoria for Tuberculous Patients.*

AT the meeting of the Academy of Medicine held on April 30th M. Lemoine, speaking both in his own name and also on behalf of his colleague M. Carrière, said that in France after too long a period of apathy medical opinion was following with undue rapidity the course taken by the Germans, without being sure even yet that the sanatorium system was the only trustworthy method of treating tuberculosis. To cure this terrible disease, which caused the death of 150,000 persons in France every year, it was necessary above all things to remove the patient from the conditions under which he had contracted tuberculosis—these being, in the first place, overwork, intemperance, and overcrowding in towns; and, in the second place, organic taints, inherited disease syphilis, intemperance of parents, &c. Tuberculous patients living an easy life, supplied with unlimited food, and spending their time in the open air, were undergoing the proper treatment for their disease, and they could combine all these conditions without crowding into sanatoria. The majority of the tuberculous patients sent to renowned establishments in foreign countries came back very little improved, and what progress they had made was rapidly lost on returning to their homes. Then there were interminable and costly "seasons." The majority of these establishments were excellent properties in a financial sense. M. Lemoine drew a somewhat unflattering picture of certain sanatoria. In one sanatorium some of the patients contracted pneumonia owing to the cold; others, deprived of the company of their families and abruptly withdrawn from an active life, fell into a deplorable state of melancholy which was encouraged by the spectacle presented by their fellow patients. In another the patients gave themselves up to all sorts of excesses with the connivance of the managing officials. M. Lemoine has arrived at the conclusion that in any place where patients can live under the hygienic conditions mentioned above the treatment of tuberculosis may be carried out as successfully as in sanatoria, or indeed even more so. The proposal of M. Brunon of Rouen to transform into sanatoria the wards of communal infirmaries or even peasants' cottages in suitable situations was an excellent one. On the other hand, the course to which the State seemed to be committing itself, in the construction of huge establishments on the plan of that at Angicourt was costly out of all proportion to the results. To treat in this way the 300,000 tuberculous subjects in France would require, at 6000 francs (£240) per bed, an original outlay of 1,800,000,000 francs (£72 000 000) and an annual expenditure of 328,000,000 francs (£13,120,000). With a vastly smaller sum it would be possible to carry out efficacious measures of prophylaxis and to obtain much more certain results in the way of cure by, in the first place, discouraging intemperance, by admitting patients freely into the existing establishments in all country places, only making necessary structural alterations and placing them under the control of the local medical men, and, finally, by enlarging the field of action of the Poor-law medical officers with a view to the repression of the disease.

*The Use of Blisters in Diagnosis.*

M. Roger and M. Josué described to the Société Médicale des Hôpitaux on May 3rd a truly original diagnostic method based upon the microscopical examination of the serous fluid contained in the vesicle which rises when a blister is applied. This fluid always holds in suspension a great number of cells. In the normal individual a large proportion (25·19 per cent.) of polynuclear eosinophile cells is found. In persons suffering from infectious complaints these cells are fewer in number or they may be completely absent, and they reappear if the organism prevails over the infection. The examination of blister fluid, therefore, supplies valuable information as to the intensity of the impregnation of the system by infectious toxins and as to the action of the blood-forming organs. These effects depend on the influence exerted by microbial toxins on the bone marrow. When acted on by these poisons bone marrow gives rise to polynuclear neutrophile cells and is consequently unable to supply eosinophile cells. But the application of a blister creates a tendency to the production of eosinophile cells, and the examination of the effused fluid shows to what extent the bone marrow is capable of forming these elements. In ordinary chronic tuberculosis the polynuclear neutrophile cells preponderate greatly, the eosinophile cells are either very few or altogether absent, and the proportions of the other cells are somewhat variable. The cells have often a peculiar appearance, being swollen as if distended with fluid and much larger than in normal individuals. This condition of the cellular elements, without being confined to tuberculosis, is more marked in it than in other infections. In one case in which the condition was very evident it led the observers to the discovery of the existence of latent tuberculosis. In a case of fibroid phthisis M. Roger and M. Josué found 3·2 per cent. of eosinophile cells. In a tuberculous patient at the very beginning of the disease and in general good health there were 7·8 per cent. of eosinophile cells. In two cases of acute sero-fibrinous pleurisy—i.e., in localised tuberculosis of the pleura—tending towards recovery there were 13·7 and 18 per cent. of eosinophile cells. In erysipelas, mumps, acute tonsillitis, polymorphous erythema, and broncho-pneumonia they have seen the number of the eosinophile cells vary from 0 to 2 or 3 per cent., according to the stage of the

disease and the tendency to recovery. By this method of diagnosis very slight pathological changes could be recognised; it gave information as to the state of the blood-forming organs and as to the degree in which certain toxins might be present in the organism.

*Necropsies in the Army, the Navy, and the Colonies.*

In the army the rules of the service relative to necropsies give the medical officer the right of making them or of having them made under his direction whenever he considers them to be necessary. In practice necropsies are only made (1) when death has been sudden and unexpected; (2) when it has occurred out of hospital either in town or in barracks; and (3) when it has been the result of accident or is ascribed to ill-usage or neglect. The formal report of these necropsies is taken into consideration at the inquiry which in these cases is always held by the military authorities. In the navy the general idea is the same, but in addition, since many sailors are married, necropsies are made for the purpose of establishing, if necessary, the claims of the widows and orphans to a pension. According to M. Grandjux, who has just made a communication on this subject to the Society of Legal Medicine, a recent circular of the Minister of Marine orders that post-mortem examinations shall be made on the bodies of all sailors who have died in hospital. This decision has been come to in consequence of a family protesting because a pension had been refused them on the ground that the Conseil de Santé had not been able to obtain a necropsy as the relatives had claimed the body immediately after death. For vessels at sea a decision of March 16th, 1899, orders that unless there is some insurmountable obstacle necropsies shall be made in the cases of all men dying from ill-defined diseases, always with the view of establishing the claims of widows and orphans to a pension when death has been due to causes connected with the duties of the deceased. The same conditions hold good in the colonies. Speaking generally, says M. Grandjux, in the army, the navy, and the colonies, necropsies on the one hand by fixing responsibility protect individuals against ill-usage and neglect, and on the other hand for the families of the deceased they serve to establish a right to pensions. Necropsies are therefore a means of social defence and protection.

*Arsenic in Beer.*

At its last meeting the Conseil d'Hygiène et de Salubrité of the Seine adopted the following motion:—

Having regard to the cases of poisoning which have occurred in England, and especially in Manchester, although arsenic has not yet been found in imported beer in Paris, the Council requests the Prefect of Police to call the attention of the responsible Ministers to the possibility that foreign beer, syrup, confectionery, &c., imported into France may contain unwholesome substances or even poisons.

May 14th.

## BERLIN.

(FROM OUR OWN CORRESPONDENT.)

*The Battle of the Clubs in Leipsic.*

THE strike of the medical officers of the Leipsic sick club has now come to an end through the mediation of the municipal authorities. It has been agreed: (1) that the committee of the medical officers' union shall consist exclusively of members engaged in club practice and not of other medical men; (2) that a permanent court of arbitration shall be created, consisting of members of the Leipsic medical chamber and members of the committee of the club, presided over by the chief medical officer of the city of Leipsic, and empowered to settle any dispute arising between the club and its medical officers; and (3) that the club shall maintain the free choice system and shall not issue orders direct to the medical officers without reference to their committee. Both parties have accepted these conditions and the strained relations so unpleasant to both the medical officers and the club members have now happily disappeared. It is, however, an advantage that public attention has been drawn by these events to the state of medical practice in Germany and especially to club practice, and it is to be hoped that in the forthcoming legislation relative to sick clubs the interests of the medical profession will be regarded more than has hitherto been the case.

*Pharmaceutical Chemists and Sick Clubs.*

A dispute of a different nature and one in which the medical profession is only concerned indirectly deserves to be noticed as it affords a good example of the aggressive policy pursued by the sick clubs. The scene of the present conflict is in Berlin, the opposing forces being the majority of the clubs on one side and the Berlin licensed pharmacies on the other. To make the position of affairs intelligible it will be necessary to give some account of the German law relative to pharmaceutical businesses. The number of pharmacies (Apotheken) is limited for every town by the authorities and is increased only in proportion to the growth of the population. When a new pharmacy is to be established in a district of any town candidates, who of course must be qualified pharmaceutical chemists (Apotheker) are invited to make application to the local authority, and the licence is, as a rule, given according to seniority. Formerly, the licence could be sold at once to any other qualified pharmaceutical chemist, but this is no longer possible under the law. When the licence has been granted the holder is bound to establish the pharmacy in the district assigned to him within a certain time and to conduct it himself. He cannot sell it, but if at any time he wishes to retire he has to give back his licence which is then granted to another applicant. If he dies, the business may, however, be conducted on behalf of the widow and children by an authorised representative for 10 years. The licensed pharmacies are all under Government control and the official requirements as to the state of the premises, the quality of the drugs, and the laboratory arrangements must be strictly observed. A good deal of money is therefore required for establishing a pharmacy and many of the licensees, especially in the larger towns, where house-rent is very high, have to borrow money and to pay heavy interest, so that their financial position may from the beginning be rather precarious. In addition to the licensed pharmacies there exist, especially in the larger towns, drug-stores which are not under special Government control, but are subject only to the general laws affecting workshops and trades. Their number is therefore not subject to any limitation and no licence is required, but they must not sell poisons, neither may they compound medicines. Their business consists only in the so-called Handverkauf (sale of simple remedies such as may be purchased without the written prescription of a medical man). To return to the above-mentioned conflict between the clubs and the pharmacies it has to be explained that hitherto it has been the rule that the club members were allowed to order their medicines in any licensed pharmacy in Berlin. When they showed a prescription written by a medical officer of their club on a voucher with the club stamp they had nothing to pay, as the druggist's charges for all drugs, medicine, &c., were settled quarterly at the club offices. Medicine was thus obtained on credit and other facilities which it would take too long to explain were granted to the club members by the pharmacies. The clubs, on the other hand, agreed to instruct their members to order everything from the licensed pharmacies even those compounds which were obtainable in ordinary drug-stores. This state of things had gone on as long as sick clubs had existed in Berlin, but some time ago a movement was set on foot which was intended to have the effect of withdrawing some of the custom of the clubs from the pharmacies. It was alleged that the prices charged by the pharmacies, although fixed officially by the Government, were much too high, that great profits were exacted even from the poorer classes, and that a discount of at least 10 per cent. ought to be granted to the clubs. The Association of Proprietors of Licensed Pharmacies declined to allow any abatement of their ordinary prices and the great majority of the Berlin clubs then decided to boycott the pharmacies so far as the law permitted, the members being instructed to deal as much as possible with the drug-stores. For obtaining poisonous substances, and specially compounded medicines which could only be sold by licensed pharmacies, the committee of the united clubs selected out of the 200 pharmacies in Berlin and its suburbs 60 with which club members were authorised to deal to the exclusion of the rest. In this way the clubs hoped that disunion would arise among the licensees and that their resistance would be broken. The licensed pharmaceutical chemists had, however, previously to the announcement of the boycott agreed among themselves not to enter into any negotiations with the clubs without the consent of the pharmaceutists' union and to pay a fine in the event of failing to keep their agreement. Moreover, the money paid by the clubs to the 60 selected pharmacies was to be divided according to the previous year's income among all

the 200 pharmacies which were open. The pharmaceutists' union also issued public notices to the effect (1) that the proceedings of the clubs were not in the interest of the members who, when they required medicine, instead of applying at the nearest pharmacy, might have to walk at night for half an hour before coming to one of the selected pharmacies; (2) that the drugs kept in the drug-stores, not being inspected by the district medical officer as in the pharmacies, were not of reliable quality; and (3) that the drug-stores being subject to the general trade laws must be closed on Sundays and from 9 P.M. to 7 A.M., whilst the pharmacies were open every day and medicines could also be obtained there at night. The conflict between the pharmacies and the clubs is still going on, to the great inconvenience of the club medical officers, as the system to be followed in giving prescriptions is now more complicated than before. There is, however, no doubt that the boycott will very soon be withdrawn, firstly because the club patients will not willingly submit to all the arrangements connected with it, and secondly because it will be useless, owing to the strong organisation of the licensed pharmacies. These circumstances are now described at length because they are of more than mere local interest, illustrating as they do the present state of club practice, a question of much importance to the medical profession in Germany. If the organisation of the medical profession were made as strong as that of the pharmaceutical profession things would become better than they are now.

May 13th.

# Obituary.

## JOHN CAVAFY, M.D., F.R.C.P. LOND.

DR. CAVAFY, for many years one of the physicians to St. George's Hospital, died suddenly in London on April 28th. He was born on June 12th, 1837, his parents, George John and Mary Cavafy, being of Greek descent, and he received his early education at Brighton and University College, London. He was destined for business and for four years worked in his father's office, but his tastes appeared to have another direction, for from boyhood he always showed great interest in natural history, especially botany and ornithology. Ultimately he determined to relinquish the business career on which he had entered and to devote himself to medicine, for which purpose he entered St. George's Hospital as a student in 1861, being then, of course, rather older than the majority of his classmates. In 1867 he took the M.B. degree at London University, on which occasion he had a place in the first class, and in 1869 he became M.D. In 1868 he was admitted a Member of the Royal College of Physicians of London and in 1876 he was elected a Fellow. At St George's Hospital he held a number of appointments, being at first demonstrator in histology and afterwards lecturer in comparative anatomy, medical registrar, and lecturer on physiology and medicine. In 1875 he was assistant physician and in 1882 he became full physician. He was also physician to the skin department at St. George's Hospital, and during the International Medical Congress held in London in 1881 he was honorary secretary to the section of skin diseases. His other appointments included those of examiner in medicine in London University and to the Royal College of Physicians of London, consulting physician to St. Peter's Home, Kilburn visiting physician to the Atkinson-Morley Convalescent Home, and physician to the Victoria Hospital for Children. In 1896 he suffered from enteric fever which permanently impaired his health, and in 1898 he recognised that his best course would be to resign his duties at St. George's Hospital, of which he was then senior physician, and to leave London where he had long re-ided in Upper Berkeley-street. He was accordingly elected consulting physician to St. George's Hospital and went to reside at Hove, Sussex. Dr. Cavafy married Marigo, the youngest daughter of Mr. Antonio Ralli, and has left one daughter. He was the author of numerous contributions to St. George's Hospital Reports and the Transactions of various societies. In THE LANCET he published articles on Urticaria Pigmentosa and on the Education of the General Practitioner in 1880, and a description of a case of Yellow Atrophy of the Liver in 1897.

A medical friend of Dr. Cavafy, an intimate acquaintance of more than 40 years' standing, writes: "In Dr. Cavafy's death the profession has sustained a heavy loss which will be felt deeply by everyone with whom he came into contact; most deeply by those who knew him best. From the moment he joined the medical school at St. George's Hospital it was felt by all connected with it that a man had come among us of exceptional ability with very varied attainments. It was immediately recognised by his contemporaries that John Cavafy was a man to be appealed to on subjects outside the profession and to be trusted whenever he expressed his opinion. Having served for a time as medical registrar at St. George's and as curator at the Westminster Hospital he became assistant physician at the former, and it was then that the opportunity was afforded him of displaying his power of observation and his special skill in imparting knowledge. Always clear, always emphatic, very rarely dogmatic, he had few equals as a teacher of medicine. Remarkable accuracy characterised all his work. Whether it was a chemical analysis, whether it was the compilation of a lecture, or the correction of a proof,—all was done with the same scrupulous exactness. He was a really good linguist, and it was due chiefly to this that in his knowledge of medical literature, both English and foreign, he was superior to most of the physicians of his time. To his talents as an artist some very beautiful water-colour drawings in the museum at St. George's bear ample testimony. It was ever a matter of regret among his friends that he devoted so little of his time to his brush. Dr. Cavafy was an excellent musician, he possessed a most delicate ear and a highly retentive memory. But apart from these varied attainments he will be best remembered for the affectionate nature which endeared him to his friends, and for his intense aversion to anything 'snobbish' or underhand. These characteristics influenced his every action in life. Courteous and genial to all, he was always indulgent to the faults of others; he had no harsh word for the conduct of anyone, unless it were tainted with injustice or dishonour. With intellectual qualities of the highest order, with an infinite sense of humour, with a keen and ready wit, he was a most delightful companion. He was a learned physician; he was a just and honourable man. No man ever made firmer friends or fewer foes."

## CHARLES HITCHMAN BRADDON, M.D. ST. AND., M.R.C.S. ENG., L.S.A.

THE death of Dr. C. H. Braddon of Manchester, at the age of 64 years, has caused widespread regret among his numerous friends. Dr. Braddon was the eldest son of the late Charles Braddon, surgeon, of Upton-on-Severn. He received his medical education at St. Thomas's Hospital, where he held the post of resident accoucheur. He then became assistant medical officer in the Derby County Asylum, from which place he went to Manchester. In 1862 he was appointed resident physician's assistant to the Manchester Royal Infirmary. In December of the same year he became assistant medical officer of the Bridge-street Workhouse. In 1864 he was appointed medical officer of the Cathedral district. In these offices he acquired that intimate knowledge of fevers which qualified him to fill so well the position of chairman of the Hospitals Sub-committee of the corporation. About this time he started in practice in Cheetham-hill, and in 1866 he was appointed surgeon to the Strangeways Prison, a position which he held for more than 20 years. For many years he acted as visiting physician to the Clifton Asylum. In 1872 he became secretary and treasurer for the Manchester district to the Royal Benevolent College, Epsom, and worked strenuously to obtain fresh adherents to that admirable institution. Since its inception he acted as treasurer of the Manchester Clinical Society of which he had also been chairman. For many years he was secretary to the Manchester Medico-Ethical Society. He also acted as medical officer to the Bethesda Home for Crippled Children, in which he took a deep interest. Recently he was elected chairman of the Manchester Medical Guild. His public services were by no means entirely of a professional character. In 1892 he was elected to the City Council as one of the representatives of Cheetham Ward, a position which since that time he has retained with the goodwill of all. He served on three

committees, and in 1896 became chairman of the Hospitals Sub-Committee, an office which he filled with assiduity and felicity. The establishment of administrative measures in Manchester for the prevention of tuberculosis was in no small degree owing to his sympathetic support. In politics he was a Conservative and he acted as chairman of the Conservative Association in Crumpsall. He was a Churchman and was churchwarden at St. Luke's for many years, taking much interest in the church and in the schools. He was a Justice of the Peace for the county of Lancaster. Very popular in his profession, in private life he had many friends. Genial, even-tempered, kind-hearted, and just, he was at the same time a man both of decision and judgment. Careful and sparing of speech, his remarks carried weight and advanced the object which he supported. He has left a widow and grown-up family.

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DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. S. Lamanski of St. Petersburg, a physiologist and physicist whose published papers deal especially with electrical fluorescent phenomena in physiology. He was 60 years of age, and as a student had worked under Rudolf Leuckart, Helmholtz, and other distinguished physiologists.—Dr. H Gosse, Professor of Forensic Medicine in the University of Geneva.—Dr. W. von Heinecke, Professor of Clinical Surgery in Erlangen.—Dr. von Iterson, Professor of Clinical Surgery in Leyden.—Dr. Karl Laufenauer, Professor of Psychiatry and Neurology in Budapest.—Dr. H. Napias, Director of the Assistance Publique of Paris.—Dr. F. Wayland Abbott, a well-known New York ophthalmic surgeon.

# Medical News.

AT the meeting of the Cheltenham Town Council held on May 6th it was resolved to increase the salary of Dr J. H. Garrett, medical officer of health, from £500 to £600, on account of his excellent work during the past nine years.

BEQUESTS TO MEDICAL CHARITIES.—Mr. T. E. Exley, who died recently at Trowbridge, has bequeathed the following legacies:—Bristol Royal Infirmary, £1000; Bristol General Hospital, £1000; and the Trowbridge Cottage Hospital, £500.

MONUMENT TO PROFESSOR HUXLEY.—It is proposed to erect at Ealing (the place of his birth) a memorial to Professor Huxley. The form it will take is not at present decided upon. Subscriptions to the fund may be forwarded to Mr. T. Simpson, Fennymere, Castle Bar, Ealing.

BRISTOL MEDICAL CHARITIES.—The late Miss Mary Cannington of Bristol bequeathed £10,000 in consols to the Bristol Royal Infirmary, £5000 to the Bristol General Hospital, and £500 each to the Bristol Dispensary and the Bristol Eye Hospital.

NATIONAL SANATORIUM FOR CONSUMPTION, BOURNEMOUTH (OPEN-AIR TREATMENT).—The annual general meeting of governors of this institution was held in London on May 9th at the Westminster Palace Hotel, the Earl of Eldon, the President, occupying the chair. The annual report of the committee for the year 1900 was placed before the governors, the statement of accounts showing a balance in hand of £122. Special measures were considered for meeting the increase in necessary annual expenses incurred by the efficient carrying on of the open-air treatment of patients, which had been successfully adopted for some time past. Measures having been also discussed for obtaining increased funds to carry out the proposed extension of the building, it was resolved that a further appeal for donations and subscriptions should be made to the public. The following resolution was also unanimously passed:—

That the humble petition of the governors and committee of this charity be placed before His Majesty the King for his gracious continuance of the Royal patronage formerly granted by Her late Majesty Queen Victoria since the year 1863.

THE ROYAL INSTITUTION.—On Friday evening, May 10th, at the Royal Institution, Professor J. C. Bose gave a lecture on "The Response of Inorganic Matter to Mechanical and Electrical Stimulus." Referring to the production of a current of electricity in the optic nerve when the stimulus of light was applied to the eye, he said that although the electric response had been considered to be a delicate sign of life, as a matter of fact inorganic bodies also responded to similar tests. Both the form of response and the condition under which it was manifested showed a remarkable similarity between living and inorganic matter. This argument Professor Bose sustained by a number of statements and he showed an artificial retina which was sensitive to light and to electricity.

UNIVERSITY OF CAMBRIDGE.—H. C. Haslam, M.A., M.B., B.C., of Gonville and Caius College, has been elected to a John Lucas Walker studentship in pathology.—Dr. Sladen, who received permission to leave his work in Cambridge to join his mobilised militia battalion for service in Ashanti, and who has now returned, has been reinstated as a second student.—At the congregation on May 9th the following medical and surgical degrees were conferred:—M.D.: F. M. Pope, M.A., Magdalene College; A. R. Paterson, M.A., Emmanuel College; and A. B. Green, M.A., Downing College. B.C.: A. E. Hodder, King's; H. Gordon-Smith, C. H. Miller, G. H. Orton, and J. C. S. Rashleigh, Trinity; J. A. Glover, St. John's; C. H. Glenn, Pembroke; R. F. Williams, Caius; and A. W. Greig, Jesus.

PREVENTION OF TUBERCULOSIS.—The annual meeting of the Devon and Cornwall branch of the Association for the Prevention of Consumption and other forms of Tuberculosis was held at Plymouth on May 9th under the presidency of the Earl of Mount-Edgcumbe. There were also present Surgeon-General Evatt, Dr. Lionel Weatherly, Dr. E. L. Fox, Mr. P. Swain, Dr. H. W. Webber, Mr. T. Bulteel, Mr. C. Wills, and Dr. F. Bushnell. The report alluded to the smallness of the income of the branch, the balance over expenditure being only £31, and stated that in order to carry out the work satisfactorily a larger income was necessary. It was stated that over 1000 deaths had occurred from consumption in the two counties during the past year, a decrease of 100 as compared with the preceding 12 months, and it is estimated that about 3000 are suffering from the disease. The committee advocate the establishment of a bacteriological laboratory for the early diagnosis of consumption, a home for advanced cases, and a sanatorium.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.—A quarterly meeting of the Royal College of Physicians of Edinburgh was held on May 7th, Dr. Fraser (the President) being in the chair.—The President reported that together with the Vice-President and the Treasurer he had been received by His Majesty the King who graciously accepted the loyal address of the College and handed to him the following reply which the President read to the Fellows standing:—

I thank you for your expressions of sympathy with myself and my family in our present grief and for the loyal and dutiful assurances of attachment to my Throne and person contained in this address.

You may be assured that the efforts of the members of your profession for the advancement of medical science and the preservation and improvement of the health of the people will ever command my warmest sympathy and support."

Lewis Campbell Bruce, M.D., M.R.C.P. Edin., and Claude Buchanan Ker, M.D., M.R.C.P. Edin., were admitted by ballot to the Fellowship of the College.—On a ballot the following candidates were admitted to the Membership of the College—viz.: David Duncan Main, L.R.C.P. & S. E., Hangchow; John Jackson Berry, M.D., Manchester; John Malcolm Farquharson, M.B., C.M. Edin., Edinburgh; Thomas Manners-Smith, M.B., B.C. Cantab.; Francis Herbert Aylen Clayton, M.D. Edin.; and James Garvie McNaughton, M.D. Edin.—The Registrar reported that since the last quarterly meeting 32 persons had obtained the Licence of the College by examination.—The College approved of the address of congratulation to the University of Glasgow on the occasion of the celebration of the ninth jubilee of its existence.—On the nomination of the President the following delegates were elected to represent the College at the British Congress on Tuberculosis—viz: the President, the Vice President (Dr. James Andrew), and Dr. G. A. Gibson and Dr. R. W. Philip.—By vote of the College two Licentiates were expelled from the College and deprived

of their Licences, and a third was deprived *sine die* of all his rights and privileges as a Licentiate of the College.

THE CITY CORONER'S SUPERANNUATION.—The Corporation of London has granted Mr. S. F. Langham on his retiring from the office of coroner an allowance of £600 a year.

PRESENTATION TO A MEDICAL MAN.—Mr. Thomas Carson Fisher, M.D. Dub., of Bowral, New South Wales, on his leaving that town after a residence there of 11 years, has been presented with an illuminated address, a purse of sovereigns, and a travelling bag.

THE STOCKPORT ISOLATION HOSPITAL.—The alleged mismanagement of the Isolation Hospital in Dialstone-lane was discussed by the Stockport Town Council recently. The discussion did not make quite clear whether the patients were kept short of food as was alleged, but the acrimonious feeling which it is evident exists between some of the parties concerned is more than regrettable.

RECOVERY OF MEDICAL FEES.—At the Exeter Police-court on May 7th Mr. J. Somer and Dr. J. W. Sandoe, surgeons, of Broadclyst, Devon, sued the executors of a deceased lady for £7 17*s.* for professional services. For the defence the solicitor pleaded the executors' "right of preference and retainer," but his honour Judge Woodfall gave judgment for the plaintiffs.

UNSUITABLE FOOD.—At an inquest held in Bristol on May 7th upon the body of an infant, aged seven months, who had died suddenly, medical evidence showed that death resulted from convulsions, probably caused by some fried fish which was discovered in the stomach at the post-mortem examination. The jury returned a verdict accordingly.

LITERARY INTELLIGENCE.—We are informed that Dr. G. Vivian Poore's volume of "Essays on Rural Hygiene," first published by Messrs. Longman in 1893, has just been issued at Wiesbaden in a German translation under the title of "Essays über Hygiene auf dem Lande." Dr. Eugen Farkas of Budapest, who was engaged on a Hungarian version of the same work, has unfortunately died before completing the translation.

UNSATISFACTORY VACCINATION.—At the meeting of the Barton Regis (Bristol) Board of Guardians held on May 10th it was decided to support the action of the Portsmouth Union and petition the Local Government Board that for children vaccinated privately the operation should be of the same standard as for those vaccinated publicly. The chairman (Mr. Shipley) said that the way in which some vaccinations were performed in one place was a complete farce.

FRENCH HOSPITAL AND DISPENSARY.—The thirty-third annual dinner in aid of the funds of this institution was held on May 11th at the Hotel Cecil, His Excellency M. Paul Cambon, the French Ambassador, being in the chair, supported by the Lord Mayor and Sheriffs and many members of the *corps diplomatique*. After the toast to M. Loubet, President of the French Republic, had been drunk the Chairman proposed that of the King and the Royal Family, mentioning that His Majesty had been graciously pleased to continue the patronage which Her late Majesty had extended to the French Hospital. In proposing the toast of the Founders, Benefactors, and Supporters of the hospital the Chairman said he was pleased to see so many representatives of the diplomatic body present, and after thanking the Lord Mayor for his support he congratulated Sir William MacCormac on his recent promotion in the Legion of Honour. M. Metaxas, the Greek Minister, responded on behalf of the guests and spoke in terms of commendation of the services rendered to the hospital by the secretary, M. Pontdepeyre. He was followed by the Lord Mayor who pointed out that the hospital, which was founded in 1867 to accommodate 16 patients, now had accommodation for 70, it having been rebuilt under very favourable conditions. Dr. Ogilvie responded on behalf of the medical staff in a humorous speech, delivered partly in English and partly in French. The musical programme, under the direction of Signor Tito Mattei, was unusually well filled and well rendered by Miss Percival Allen, M. H. Leoni, Miss Florence Venning, Master Bernard Crook, and other vocalists.

COST OF VACCINATION.—At the meeting of the Penzance Board of Guardians held on May 9th some discussion took place upon the amount of the vaccination fees. It was stated that in 1898 the fees amounted to £108 and in 1900 to £377. Some members considered that it would be more economical to obtain a medical officer to devote the whole of his time to the duties of the office, but on the clerk explaining that a scale of fees had been fixed by law and that the guardians had adopted the minimum the matter dropped.

LLANDAFF AND DINAS POWIS RURAL DISTRICT.—The annual report of Dr. R. Prichard, medical officer of health of the Llandaff and Dinas Powis Rural District, states that in the district (which is one of the largest in the kingdom, having an area of nearly 102 square miles, with a population of 22,400) the births during 1900 numbered 656, equal to a rate of 31·67 per 1000. 332 deaths were registered, giving a death-rate of 14·6 per 1000. The average age at death was 36¼ years. The infantile deaths were at the rate of 3·76 per 1000, and in the proportion of 118 per 1000 births.

# Parliamentary Intelligence.

## NOTES ON CURRENT TOPICS.

*Gases from Alkali Works.*

THERE has been introduced into the House of Lords a short measure to strengthen the law with regard to the pollution of the atmosphere by acid gases from alkali and other chemical works.

*Lunacy Bill for Ireland.*

The Bill introduced by the Government to amend the law in Ireland relating to lunatics embodies several provisions of the law in England with regard to this subject. For instance, it proposes that the Lord Lieutenant may, in addition to his power of absolute discharge, also discharge a criminal lunatic conditionally. In the present state of the law in Ireland a criminal lunatic can only be released without condition. Another provision of the Bill deals with the ill-treatment of lunatics, and a third with the expenses incurred in the care and treatment of criminal and dangerous lunatics.

## HOUSE OF COMMONS.

THURSDAY, MAY 9TH.

*Medical Provision in the West of Ireland.*

Mr. DUFFY asked the Chief Secretary to the Lord Lieutenant of Ireland (1) whether he had any further news to communicate to the House respecting the spread of fever in the Arran Islands; (2) whether he was aware that the medical inspector of health fell a victim to the malady and was left for an entire week without a medical attendant until he died; whether any complaints had reached him respecting the neglect shown to this gentleman who died through neglect in the execution of his duty; and whether any medical gentleman was temporarily appointed or volunteered to look after and discharge his duties during his illness; and (3) whether, in view of all the circumstances, he will cause an inquiry to be made into the entire matter.—The ATTORNEY-GENERAL for IRELAND replied to the question, saying that the latest report from the acting medical officer of health, received on April 26th, was to the effect that the epidemic had passed away. As regards the late medical officer of health, it appeared that although he had recovered from fever he had since succumbed to pneumonia. He had no information as to the other matters referred to in the second paragraph. When the late medical officer fell ill the islands were temporarily placed in charge of Mr. M. F. Lyden, the medical officer of Galway No. 1 Dispensary District, and a medical gentleman from Dublin had since been appointed to the vacant office. There did not appear to be any necessity for an inquiry as suggested at the conclusion of the question.

*Rabies in Dogs.*

Mr. HANBURY, interrogated as to the effect of the dog regulations of the Board of Agriculture, said that in 1895 there were 672 cases of rabies and in 1896 there were 438, while after the regulations in 1900 there were six cases, and in 1901 up to May 4th there was only one case.

FRIDAY, MAY 10TH.

*Scarlet Fever in the Forest Gate Schools.*

Dr. FARQUHARSON asked the President of the Local Government Board whether he could say how many children had suffered from scarlet fever during 1900 and 1901 at the Forest Gate Poor-law schools?—Mr. LONG replied that he understood that there was no case of scarlet fever during 1900 and 13 cases during the present year down to May 4th.

MONDAY, MAY 13TH.

*The Disposal of Arsenicated Glucose.*

Mr. CHANNING asked the President of the Local Government Board whether his attention had been called to the evidence given by Mr. Williamson, representative of Messrs. Bostock, that no less than 700 tons of glucose and invert sugar supposed to be contaminated with arsenic were now in the possession of the liquidators of the company; and whether, in the interest of the creditors, he could and would take steps to prevent any disposal of this contaminated material to the risk of the public health.—Mr. LONG replied: I am aware of the evidence

given by Mr. Williamson on this subject before the Royal Commission. I understand, however, that he has assured the Commission that none of the material referred to will be disposed of without notice to them. I also understand that the Commission have suggested that before the material is disposed of in any way it should be so dealt with by the addition of colouring matter or otherwise as to render its employment for purposes of food impracticable and that the liquidators have undertaken to consider this suggestion. The hon. Member may rest assured that the matter will not be lost sight of.

*The Medical Register at Irish Petty Sessions.*

Mr. MCFADDEN asked the Attorney-General for Ireland whether he was aware that the Castle authorities had discontinued the issue of the Medical Register for the use of the petty sessions courts in Ireland, and whether, considering the usefulness of the former practice to the officials, the issue would be revived.—Mr. ATKINSON replied: The gratuitous supply of this publication to courts of petty sessions in Ireland has been discontinued on the advice of the registrar of petty sessions clerks. It is not proposed to revert to the former practice.

TUESDAY, MAY 14TH.

*Reserve Officers of the Royal Army Medical Corps.*

Mr. MACNEILL asked the Secretary of State for War whether he could explain why, while under the provisions of the army orders army reserve officers called out for service were placed at the bottom of their rank in the regiment or corps to which they might belong, but were eligible for promotion when so serving, the re-employed reserve officers of the Royal Army Medical Corps were not included within the provisions of such orders, but were placed outside the general list and excluded from promotion; and whether he would see that the privilege extended to army reserve officers of other branches was likewise conferred on the re-employed reserve officers of the Royal Army Medical Corps.—Mr. BRODRICK replied that the medical reserve officers should, when re-employed, be shown in the active list of the medical staff, and this would be carried out in future editions of the Army List. They were eligible for promotion during employment.

*Netley Hospital Case.*

Mr. J. P. FARRELL asked the Secretary of State for War whether he was aware that evidence was submitted in the course of the inquiry into the alleged ill-treatment of Private M. Lee, late of the Imperial Yeomanry, in Netley Hospital, to support the charge that the probationer in charge of the ward said that when he had done with him he would have no more fits; whether he was aware that Lee's bodily health had been seriously injured by the treatment which he had received; and whether he could state what punishment had been awarded to the offending official.—Mr. BRODRICK replied: The evidence does not appear to show that the surgeon on probation who attended Private Lee used the expression as attributed to him or that Lee's health has been seriously injured. But the treatment, with whatever good intentions applied, is not sustained as applicable to the case by high authorities, and the surgeon's experience does not justify us in continuing his services.—Mr. FARRELL: Has the right hon. gentleman consulted the eminent medical authority he referred to last week?—Mr. BRODRICK: It is the advice of the eminent specialist whom I consulted which has forced me to decide that we cannot continue the services of the surgeon.

*Sewage and Drainage.*

At this sitting of the House Sir WALTER FOSTER formally introduced a Bill to enable local authorities to deal separately with the sewage and drainage of their districts.

## ROYAL COMMISSION ON ARSENICAL POISONING.

FRIDAY, MAY 10TH.

THE Royal Commission on Arsenical Poisoning, consisting of Lord Kelvin (Chairman), Sir William S. Church, Sir William Hart-Dyke, M.P., Professor Thorpe, Dr. B. A. Whitelegge, and Mr. Cosmo Bonsor, with Dr. G. S. Buchanan as secretary, met again to-day in the Westminster Palace Hotel, London, and proceeded with the examination of witnesses.

Mr. WILLIAMSON, secretary of Bostocks, Limited, now in liquidation, said that he desired to hand to the Commission a written statement instead of giving oral evidence which might prejudice the action at law now pending with the Messrs. Nicholson of Leeds.

Sir WILLIAM S. CHURCH, who was acting temporarily as Chairman, said that the Commission would receive the statement and would not cross-examine the witness upon it, but there were one or two questions not dealing with the statement which they wished to ask.

Mr. WILLIAMSON, in reply to Sir William Church, said that there was a considerable amount of glucose and invert sugar contaminated with arsenic still in the possession of the liquidators of the company. Part of it was left on the hands of the company and part had been returned from brewers to whom it had been supplied. The total quantity would be about 700 tons. About 100 tons of glucose had been disposed of for textile purposes. Beyond the statement that the article was contaminated with arsenic they had taken no other precaution. He believed that it was the intention of the liquidators to go on selling the stock in this or some other way, and he was not aware that they proposed to take any further safeguard against mischance.

Sir WILLIAM CHURCH: We know that some of your sugars were used by children for making toffee with bad results.

WITNESS: We were not aware of that.

Sir WILLIAM CHURCH: And in the same way they might take this contaminated sugar from, say, a leather-dresser's store.

WITNESS: We did not think it necessary to suggest any safeguard nor do I know of any safeguard we could adopt. The sugar is not intended for food.

Sir WILLIAM CHURCH: But surely 700 tons of this poisonous substance lying about is a dangerous state of things?

WITNESS: Yes, if there is any chance of it getting into food.

Sir WILLIAM CHURCH: Could it not be stained or made so disagreeable in appearance that it would not be likely to be used in food?

Professor THORPE: It might be made repulsive by the introduction of materials which would not affect its use for commercial purposes.

WITNESS: If that could be done it might be done.

Sir WILLIAM CHURCH: I do not think it is the part of the Commission to suggest that to you, but I do think that it is the part of the Commission to suggest that this material should not be parted with by the liquidators or by Bostocks except with such precautions as to make it impossible that accidents can happen from its use.

WITNESS: I will put that before the liquidators for their consideration.

Dr. WHITELEGGE: Has the medical officer of health of Garston been consulted?

WITNESS: He has not.

Sir WILLIAM CHURCH: I put it to you that the Commission ought to be informed what steps it is proposed to take.

WITNESS: I will see that you are informed.

Sir WILLIAM CHURCH: And the destination of each consignment?

WITNESS: Yes; I will see that that is done.

Mr. E. G. FRANCIS, manager of the Mambré Saccharine Company, Limited, Hammersmith, gave evidence as to the use by the company of sulphuric acid. For many years they employed only brimstone acid, but now they employed acid made from pyrites which they found to be purer than brimstone acid. He attributed the greater purity of the former to the care taken in the purification of the pyrites. In his opinion there was really no risk of glucose or invert sugar being contaminated if proper care were taken in its preparation. He was aware that there was a prejudice against the use of pyrites acid, and for that reason he had tried many brimstone acids, but he had never found one as pure as the pyrites acid used by the company. In each case the company gave a guarantee that their goods were absolutely free from arsenic, and he saw no objection to this guarantee being tested by some Government department.

Mr. RUDOLPH FREDERICK WAHL, managing director of the Nord Deutsche Kartoffel-Mehl Fabrik, Limited, of Custrin in Prussia, was the next witness, and in the course of his examination he said that his company manufactured purified starch or farina, dextrine, and glucose. Not less than 30,000 tons of farina were annually employed in Europe for food purposes, of which his company made 7000 tons. He had never heard the wholesomeness of farina from potatoes called in question; it was quite free from nitrogenous matter. The glucose they made was made with much less than 2 per cent. of acid and with a pressure of about two atmospheres. It was made from purified potato starch which could be converted with a small proportion of acid. In Germany glucose was largely used for brewing and also for the improvement of wines, the total quantity used per annum being not less than 10,000 tons. It was also largely used in wine-making in France and Italy. Glucose improved an inferior vintage. If the season had been deficient in sunshine the addition of glucose gave the wine the necessary alcoholic strength. In Bavaria, Wurtemberg, and Baden the use of malt substitutes was prohibited by law. The Farmers' League had a very strong hold on the Parliaments and had brought about the prohibition. While, however, the law prohibited the use of glucose in Bavaria it was well known that it was smuggled into the country. His company obtained their sulphuric acid from the first chemical works in Germany and always received with it a guarantee of purity. They tested their products every day in the progress of manufacture and when finished. Nearly all of the glucose that came to this country from Germany was made by his company and it would be news to him to hear that German-made glucose contained arsenic. He would have no objection to their products being tested by the Customs Department. He assured the Commission that not even a trace of arsenic had been found in the sulphuric acid they used.

Mr. W. W. BERRY, hop-grower near Faverham in Kent, gave evidence as to the methods of Kent hop-growers. As soon as the plants appeared above the ground they were attacked by the Kent flea and for the checking of this insect he said they used a strong solution of soft soap and some quassia. At a later stage the plants were sprayed vigorously to rid them of the aphis, soft soap and quassia being again used. No such chemical as Paris green was used on hops. Sulphur, however, was largely used. It was used in quantities of about three or four pounds of dissolved sulphur to the acre of hops, the object of its use being to prevent mould. In the early days it was used very carelessly, but not so nowadays when the greatest care was observed. Of course, in the case of a crop being threatened with ruin the grower would use sulphur very vigorously in order to save the crop and would do so even when it was in flower. The brewers, however, objected to the flower being coloured with sulphur. Having described the processes of drying and curing, witness said that he had known hundreds of samples of hops to be tested without a trace of arsenic being found in one of them. If arsenic were in any case found in hops then he should say that it must be due to the use of inferior fuel.

The Commission then adjourned.

## Appointments.

*Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to* THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

ABBOTT, C. E., L.R.C.P. Irel., M.R.C.S., has been appointed District Medical Officer, Cheltenham Union, vice J. P. Bevan, deceased.

ADAMS, A., M.B., B.Ch. Oxon., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer, Listeard Union, vice L. F. Houghton, resigned.

ADKINS, A. J., M.D. Lond., L.R.C.P., M.R.C.S., D.P.H. Camb., has been appointed Resident Medical Officer of the Workhouse, Stoke-upon-Trent Union, vice W. Crabtree, resigned.

ASHBY, A., M.B. Lond., F.R.C.S. Eng., has been appointed Medical Officer of Health, Caversham Urban District, vice D. Wood, deceased.

BREARS, C. F., M.D., C.M. McGill Univ., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed District Medical Officer, Sunderland Union, vice H. Liston, deceased.

BROWNFIELD, H. M., L.R.C.P. Edin., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Petersfield District of Hampshire.

CLOWES, E. F., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Wotton-under-Edge District of the county of Gloucester. Also Medical Officer for the Charfield and Tortworth District by the Thornbury (Glos.) Guardians and District Council.

CROSSMAN, EDWARD, M.D. Durh., L.R.C.P. Lond., M.R.C.S., L.S.A., has been re-appointed Medical Officer of Health for the Barton Regis Rural District Council.

DRINKWATER, FRED ANDREW, M.R.C.S., has been appointed House Surgeon to the Wrexham Infirmary.

EDMUNDS, ARTHUR, M.R.C.S., L.R.C.P., has been appointed House Physician to the Paddington Green Children's Hospital, London, W.

GRIFFITH, A. L., M.D. St And., M.R.C.S., has been appointed District Medical Officer, Parish of Paddington, London.

HARMAN, L., M.B. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer, Kingston Union, vice F. T. Bennett, resigned.

HAYDON, ARTHUR GEORGE, M.D., M.R.C.S., has been appointed Medical Officer in charge of the Suffolk Regiment, and Civil Surgeon, Royal Army Medical Corps.

JACKSON, A. L., M.D. Camb., has been appointed District Medical Officer, Spalding Union.

JONES, EVAN, L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Surgeon to the Cardiff Infirmary.

LEMPRIERE, L. R., M.B., Ch.B. Vict., has been appointed Junior Resident Assistant Medical Officer, Township of Manchester, vice J. E. Judson.

LLOYD, R. E., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Medical Officer at the Infirmary, Parish of St. Pancras, London.

LOCKYER, CUTHBERT, M.D., B.S., M.R.C.P. Lond., F.R.C.S. Eng., has been appointed Obstetric Registrar to the Charing Cross Hospital, London.

MACPHERSON, L. W. CROMBIE, M.B., C.M., has been appointed House Surgeon to the Paddington Green Children's Hospital, London, W.

MALE, M. T., M.B. Lond., has been appointed Assistant Medical Officer at the Infirmary, Parish of St. Pancras, London.

PALMER, G. E., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer at the Gordon-road Workhouse, Parish of St. Giles, Camberwell, vice J. P. Race, resigned.

POLLARD, F. W., B.A., L.M.S. & M. Dub., has been appointed Medical Officer and Public Vaccinator, No. 2 District, Blackburn Union. Corrected notice.

REYNOLDS, B. G., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer, Parish of Hammersmith.

ROBERTS, KILHAM, L.R.C.P. Lond., M.R.C.S., has been re-appointed Medical Officer of Health for the Ampthill Rural District Council.

SANDOE, J. W., M.D. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer, St. Thomas's Union, Devon, vice J. Somer, resigned.

SCOTT, J. G. C., M.B., C.M. Edin., has been appointed Medical Officer of Health, Castle Donington Rural District, vice C. Harwood, deceased.

STEED, JOHN, M.D., C.M. Edin., has been appointed District Medical Officer, Weobley Union, vice W. R. Barton, resigned.

TAYLOR, F. E., M.A., M.Sc., M.B., Ch.B., has been appointed Resident Medical Officer to the Chelsea Hospital for Women, Fulham-road, London, S.W.

TURNER, A. C. E., M.B., C.M. Edin., has been appointed Certifying Surgeon under the Factory Acts for the Fairford District of Gloucestershire.

TURNER, ROSA, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Attendant to the Children's Home at Elm Grove, Peckham, Metropolitan Asylum District.

WEST, SAMUEL, M.D. Oxon., F.R.C.P. Lond., has been appointed Joint Lecturer on Medicine at St. Bartholomew's Hospital, London, vice Sir Dyce Duckworth, resigned.

WILCOX, H., M.B. Aberd., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Fleet District of Hampshire.

# Vacancies.

*For further information regarding each vacancy reference should be made to the advertisement (see Index).*

ASYLUM FOR IMBECILES, Caterham, Surrey.—Senior Assistant Medical Officer, unmarried. Salary £250 per annum, rising to £300, with rations, lodging, attendance, and washing.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE, Gloucester.—Junior Assistant Medical Officer. Salary £150 per annum (rising to £170), with board, &c.

BETHLEM HOSPITAL.—Two Resident House Physicians for six months. Honorarium at the rate of £12 12s. each per quarter, with apartments, board, and washing.

BIRKENHEAD UNION.—Assistant Medical Officer. Salary £120 per annum, with board, washing, and apartments.

BIRMINGHAM AND MIDLAND HOSPITAL FOR SKIN AND URINARY DISEASES, John Bright-street, Birmingham.—Clinical Assistant.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon, unmarried. Salary £150 per annum, with an allowance of £30 per annum for cab hire, and furnished rooms, fire, lights, and attendance. Also Resident Locums for two to three months. Terms 4 guineas per week, with furnished apartments.

BIRMINGHAM PROVIDENT DISPENSARY, Hockley Branch (Sands Cox Trust).—Medical Officer. Salary according to the number of members, with a guaranteed minimum of £250 per annum and residence (unfurnished).

BOROUGH OF HAMPSTEAD.—Medical Officer of Health. Salary £600 per annum.

BOROUGH OF SOUTHEND-ON-SEA.—Medical Officer of Health. Salary £400 per annum, rising to £500 per annum.

BRADFORD POOR-LAW UNION.—Junior Resident Assistant Medical Officer. Salary £100, with rations, apartments, and washing.

BRADFORD ROYAL INFIRMARY.—Dispensary Surgeon, single. Salary £100 per annum, with board and residence.

CHELTENHAM GENERAL HOSPITAL.—Junior House Surgeon, unmarried. Salary £60 per annum, with board, lodging, and washing.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY.—Resident House Surgeon. Salary £110 per year, with board, apartments, and laundress.

CHORLTON-UPON-MEDLOCK DISPENSARY, Manchester.—Resident House Surgeon, unmarried. Salary £130 per annum, with furnished rooms and attendance.

CITY OF LEEDS.—Assistant Medical Officer of Health and Inspector of Nuisances. Salary £300 per annum.

COUNTY BOROUGH OF HUDDERSFIELD.—Medical Officer of Health. Salary £400 per annum, with actual disbursements.

DEVONSHIRE HOSPITAL, Buxton, Derbyshire.—Assistant House Surgeon. Salary £50 per annum, with furnished apartments, board, and washing.

DORSET COUNTY HOSPITAL, Dorchester.—House Surgeon, unmarried. Salary £100, with food and residence.

DUNDEE ROYAL INFIRMARY.—Resident Medical Assistant for six months. Salary at the rate of £40 per annum, with board and washing.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Shadwell, E.—House Physician for six months. Honorarium £25, with board, residence, &c.

GLAMORGAN COUNTY ASYLUM, Bridgend.—Assistant Medical Officer. Salary £175, with board, lodging, and washing.

GOLD COAST.—Government Medical Officers, unmarried. Salary £400 a year, free passages, and allowances.

GROVE HALL ASYLUM, Bow, London, E.—Junior Assistant Medical Officer. Salary £120 a year, with board, apartments, attendance, and washing.

HOSPITAL FOR SICK CHILDREN, Newcastle-on-Tyne.—Resident Medical Officer. Salary £60, with board, lodging, and laundry.

HULL ROYAL INFIRMARY.—Junior Assistant House Surgeon. Salary £60, with board and lodging.

INFECTIOUS DISEASES HOSPITALS, City of Leeds.—Assistant Resident Medical Officer. Salary £130 a year, increasing to £150, with board, lodging, and washing.

JARROW MEMORIAL HOSPITAL.—House Surgeon, unmarried.

KENSINGTON DISPENSARY AND CHILDREN'S HOSPITAL.—Resident Medical Officer, unmarried. Salary £100 per annum, with apartments, board, coals, gas, and attendance.

KENT COUNTY OPHTHALMIC HOSPITAL, Maidstone.—House Surgeon. Salary £100, with board and lodging.

KINGSTON UNION INFIRMARIES.—Resident Assistant Medical Officer. Salary £150, rising to £200, with house partly furnished, coals, gas, laundry, and scale allowances for rations.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST.—Resident Medical Officer. Salary £100 per annum, with board, apartments, and washing.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer, unmarried. Salary £150 per annum, with board and residence.

NORTHAMPTON GENERAL INFIRMARY.—Honorary Ophthalmic Surgeon. Also Honorary Assistant Surgeon.

NORTH-WEST LONDON HOSPITAL, Kentish Town-road.—Resident Medical Officer. Also Assistant Resident Medical Officer, both for six months. Salary at the rate of £50 per annum, with board, residence, and washing.

NOTTINGHAM GENERAL DISPENSARY.—Senior Resident Surgeon. Salary £200 per annum, increasing by £15 every year. Also two Assistant Resident Surgeons. Salaries £160 per annum each, increasing by £10 every year, furnished apartments, attendance, light, and fuel. Unmarried.

QUEEN'S CENTRAL HOSPITAL, Cradock, Cape Colony.—House Surgeon and Secretary, unmarried. Salary £150 per annum, with board, lodging, and washing.

ROYAL CORNWALL INFIRMARY.—House Surgeon, unmarried. Salary £100, increasing by £10 a year, with board and apartments.

ROYAL FREE HOSPITAL, Gray's Inn-road, W.C.—Senior Resident Medical Officer. Salary £100 per annum, with board, residence, and washing.

ROYAL HALIFAX INFIRMARY.—Third House Surgeon, unmarried. Salary £80 per annum, with residence, board, and washing.

ROYAL ORTHOPÆDIC HOSPITAL, 297, Oxford-street.—Resident House Surgeon and Registrar, unmarried. Salary £100 per annum, with full board.

ROYAL SEA BATHING HOSPITAL, Margate.—Assistant Resident Surgeon. Salary £60 per annum, with board and residence.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—Assistant House Surgeon. Salary £50, with board, residence, and laundry.

SHEFFIELD ROYAL HOSPITAL.—Junior Assistant House Surgeon, unmarried. Salary £50 per annum, with board (exclusive of wine and beer) and lodgings.

SOUTHPORT INFIRMARY.—Resident Junior House and Visiting Surgeon, unmarried, for six months. Honorarium at the rate of £60 per annum, with residence, board, and washing.

ST. MARYLEBONE INFIRMARY, Notting-hill, W.—Second Assistant Medical Officer. Salary at the rate of £80 per annum, with board, &c.

ST. MARY'S HOSPITAL FOR SICK CHILDREN, Plaistow, E.—Resident Medical Officer. Salary £100 per annum, with board, residence, laundry, &c. Also Assistant Resident Medical Officer. Salary £80 per annum, with board, residence, laundry, &c.

STOCKPORT INFIRMARY.—Assistant and Visiting House Surgeon. Salary £70, with residence, board, and washing. Also Junior Assistant House Surgeon for six months. Salary at rate of £24 per annum, with board, washing, and residence.

SUSSEX COUNTY HOSPITAL.—Ophthalmic Surgeon.

THE CHIEF INSPECTOR OF FACTORIES gives notice of a Vacancy as Certifying Surgeon under the Factory Acts at Harleston, in the county of Norfolk.

TOWCESTER UNION.—District Medical Officer and Public Vaccinator. Salary £60 per annum, with allowances.

WEST BROMWICH UNION.—Assistant Workhouse Medical Officer. Salary £100 per annum, and £75 in lieu of apartments, board, &c.

WEST HAM HOSPITAL, Stratford, E.—Junior House Surgeon. Salary £75 per annum, with board, residence, &c.

WESTERN GENERAL DISPENSARY, Marylebone-road.—Second House Surgeon, unmarried. Salary £75 a year, with board and residence, and 10s. a month for laundry.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—Medical Officer. Salary £100 per annum, with board, lodging, and washing.

WINDSOR AND ETON ROYAL DISPENSARY AND INFIRMARY.—House Surgeon, unmarried. Salary £110 per annum, with residence, board, and attendance.

# Births, Marriages, and Deaths.

## BIRTHS.

BROWN.—On the 13th of MAY, at 6, Gibson-square, N., the wife of George Brown, M.R.C.S. Eng., of a daughter.

FITZGERALD.—On May 11th, at Southwood-lane, Highgate, N., the wife of Gerald Fitzgerald, M.B., of a daughter.

HENTSCH.—On May 12th, at Acre-lane, S.W., the wife of G. F. Hentsch, L.R.C.P. Lond., M.R.C.S., of a daughter.

LANSDALE.—On May 9th, at Trinity-square, S.E., the wife of Wm. Lansdale, M.D., M.R.C.S., L.R.C.P. Lond., D.P.H., of a son.

MACLEOD.—On May 9th, at Ladbroke-grove, W., the wife of C. E. Alex MacLeod, F.R.C.S., of a son.

PLUMMER.—On May 11th, at Old Elvet, Durham, the wife of Selby Plummer, M.D., of a daughter.

TAYLOR.—On May 9th, at Bland House, Rosslyn Hill, Hampstead, Huldah, the wife of E. Claude Taylor, M.D., M.S., of a son.

WACE.—On May 11th, at Southgate-street, Winchester, the wife of Cyril Wace, F.R.C.S., of a daughter.

## MARRIAGE.

PRESTON—BOWKETT.—On May 8th, at Emmanuel Church, West Hampstead, Francis Harrison Preston, M.A. Camb., M.R.C.S., son of the late Rev. A. M. Preston, of Winslow, Bucks, to Hilda Emily, daughter of the late Dr. Bowkett of Poplar.

## DEATHS.

BAYES.—Frederick William Bayes, M.R.C.S., of Walsingham, in his 76th year.

BRADDON.—On May 10th, at the Imperial Hotel, Blackpool, Charles Hitchman Braddon, M.D., J.P., of Ryecroft House, Cheetham Hill, Manchester, and eldest son of the late Charles Braddon, surgeon, of Upton-on-Severn, Worcestershire, in his 64th year.

DAVIDSON.—On Thursday, May 2nd, at The Dingle, Sydenham Hill, London, S.E., Lieutenant-Colonel D. C. Davidson, Indian Medical Service, Bombay Presidency, aged 50, youngest son of the late Rev. George Moir Davidson, of Watten, Caithness-shire, N.B., and son-in-law of the late General John Clarke, 25th Bengal N.I., and Commissioner, Sitapur, Oudh.

HOLT.—On the 10th inst., at Hartshill, Stoke-on-Trent, Mary Ethel, wife of Arthur Knight Holt, M.D., of Bournemouth, and eldest daughter of Joseph Knight, of Newcastle-under-Lyme, aged 38.

LEIGH-SODIPE.—At Lagos, West Africa, on the 15th April, 1901 Sodeinde Alfred Leigh-Sodipe, M.D., Assistant Colonial Surgeon, Colony of Lagos.

*N.B.—A fee of 5s is charged for the insertion of Notices of Births Marriages, and Deaths.*

# Notes, Short Comments, and Answers to Correspondents.

## THE SCOPE OF THE MIDWIFE'S DUTIES: AN INQUEST.

ON May 9th Mr. A. Braxton Hicks held an inquest at Lambeth on the body of George Ernest Eyre, the five-days-old son of a printer's labourer, living at 24, Caffin-street, Lambeth.—Elizabeth Lloyd, of 16, Caffin-street, said that she attended the mother of the deceased in her confinement, a midwife being also present. The baby was not a strong child when born.—Marian Langley, a midwife attached to Guy's Hospital Maternity Charity, residing at 1C, St. Thomas's-street, S.E. (the Institution), deposed that she attended Mrs. Eyre in her confinement. The child was expected about that time. Witness was sent for on Sunday, May 5th, and went back again. The baby was born before she got there the second time. Mrs. Lloyd said it was a natural presentation. Witness attended to the mother and child. The latter was a little discoloured but quite normal. On the Monday afternoon, about 2 o'clock, witness again visited and she paid a further visit on Tuesday or Wednesday, when the child was apparently all right; she saw nothing the matter with it. It was not a large child. One of her assistants then took over the case—one of her pupils. She was there first and sent for witness.—The Coroner (surprised): You have pupils, do you? Where is it going to stop? Pupils will be having pupils too, I suppose. I am not surprised at what the medical journals say about this midwife business. Although you are a certificated midwife, when a call is made you send a pupil, who finds something wrong and then you go. Do not you think you should have called the obstetric physician—a qualified practitioner?—Witness: I often have cases like this.—The Coroner: And I have often to hold inquests because a medical man, who could give a certificate, is not called and midwives take too much upon their own shoulders.—Witness went on to say that the nurse told her of the death at nine o'clock on Friday morning and she asked Dr. Sime, the physician, to see the child.—The Coroner: You did not see it?—Witness: No, sir.—The Coroner: You could not tell what was the cause of death, then why did you give this certificate:—

"GUY'S HOSPITAL.

"Guy's Institution, 10, St. Thomas's-street.

"This is to certify Mrs. Eyre of 24, Caffin-street, was delivered of a male child, April 29th, that it died May 2nd from inanition with convulsions. "MARIAN LANGLEY, midwife."

Witness: I had seen the child.—The Coroner: The doctor could not give a certificate because he only saw the child after death. First of all this certificate is incorrect as to the date of death. It is on paper headed "Guy's Hospital," which gives it an official aspect. Why did you put "convulsions" when you never saw the child in one?—Witness: Dr. Sime saw the child and was of that opinion.—The Coroner: If Dr. Sime could not give a certificate, why should you? Have you ever had a case like this before?—Witness: No.—The Coroner: Then I trust you won't give another certificate. I never accept them because you are not qualified to give a certificate of any sort. If you believe what other people tell you you would have to believe anything. Did Dr. Sime authorise you to give this certificate?—Witness: Yes.—The Coroner: Do you know of the new Bill for the Registration of Midwives?—Witness: I have heard of it.—The Coroner: That is one of the things it prohibits—the giving of a certificate of any description. In future always refer a case to my officer at once, because the registrar sends it to me. In this instance the alleged cause of death is not put down at all, because the registrar found it was a midwife's certificate. You have made a very fair guess, but it is not correct in one way.—Dr. Francis Wheeler Sime deposed to having made a post-mortem examination of the body by the coroner's order. There was an absence of any definite cause of death, but from his inspection of the body after death and the post-mortem examination he came to the conclusion that death was due to infantile convulsions.—The Coroner: Your midwife tells us that you said she might give a certificate?—Witness: Yes; of course, you see, we are not used to Lambeth. We have about 400 births a month and it is impossible for me to see them all.—The Coroner: If a child gets a convulsion and dies do you not refer it to the coroner?—Witness: If the registrar is not satisfied we do, or, rather, we send the paper to the registrar, and if he is not satisfied he sends to the coroner.—The Coroner: The registrar knows less about it than anyone else and he might accept it and it would be an uncertified death. I do not think medical men should put so much power into the hands of registrars, some of whom do not know their work. I have no control over Southwark, but I used to have as deputy coroner. Anyhow, as far as Lambeth is concerned when you have a case in my district will you at once inform my officer who will make inquiries? Probably your opinion will be quite as valuable as if I had a post mortem made. This certificate I consider most irregular. The matter is of importance to the public at large, whom I represent to some extent.—The jury fully endorsed the coroner's observations.—The Coroner (to Miss Langley): I hope you will tell all your probationers not to take too much upon themselves.

## MEDICAL MEN AND THE INCOME-TAX.

*To the Editors of* THE LANCET.

SIRS,—The very pertinent remarks in THE LANCET of May 4th, p. 1286, about medical men and the income-tax induces me to call the attention of others to what seems a great injustice. For instance, in returning the income from all sources in Schedule D, one naturally includes appointments. Well, the surveyor of taxes expects a return in Schedule E for the latter. I will explain. In the union with which I have been long connected—for the last 10 years—all the medical men are taxed separately on their salary, vaccinations, &c., which has become quite a burden. I have asked some of my neighbours to join me in agitating about this matter, but they seem diffident. Kindly advise what is the best thing to do.

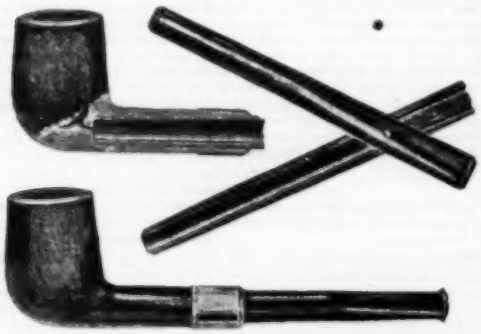
I am, Sirs, yours faithfully,

May 13th, 1901. R. I.

*** We are not quite sure what our correspondent intends to convey to us, but if he means that he pays income-tax under both Schedule D and Schedule E on the same income he is obviously paying incorrectly. He should see the surveyor for his district, who will put matters straight for him.—ED. L.

## A NEW PIPE.

WE have had submitted to us specimens of a new pipe which, we consider, merits a few words of commendation. The novel feature is the vulcanite mouthpiece. This is split longitudinally so that the bore is represented in each half of the mouthpiece by a shallow trough. The two halves revolve on each other round a pin situated near the lip end, and are kept in close approximation to each other by the fact that the parts are very accurately made and that the whole tube when closed sinks for more than an inch into the bowl. A specimen of one of the pipes that had been smoked



regularly for some months was submitted to us for inspection and the two halves of the mouthpiece were as perfectly joined as they are in the new pipes. The value of the innovation is obvious. When the pipe wants cleaning it is not necessary to use the accustomed form of pipe-cleaner. The mouthpieces can be opened and wiped and the pipe can be always kept dry. Smokers have brought to their notice a good many new ideas in pipes and are generally sceptical concerning the benefit to be derived from them, but the mouthpiece which we have described will, we think, repay their attention. The pipes are well-made and neat-looking. They can be purchased at the "M.P." Pipe, Limited, 79, Gracechurch-street, London, E.C., price 2s. 6d.

## THE CASE OF MR. LOUIS FERDINAND DODS: AN APPEAL.

*To the Editors of* THE LANCET.

SIRS,—I have this morning received from Mr. W. J. Walsham a further list of contributions as under.

I am, Sirs, yours faithfully,

May 3rd, 1901. JOSEPH H. S. KING.

| | £ | s. | d. | | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Dr. Charles Coates ... | 2 | 2 | 0 | Mr. Nettleship ... ... | 2 | 2 | 0 |
| Dr. A. P. Luff ... ... ... | 1 | 1 | 0 | Mr. Cursham Corner ... | 0 | 10 | 6 |
| Mr. Andrew Fuller ... | 1 | 1 | 0 | Mr. R. L. Legate ... ... | 1 | 0 | 0 |
| Dr. Samuel West ... ... | 3 | 3 | 0 | Dr. Cullingworth ... ... | 3 | 3 | 0 |
| Mr. Walshe ... ... ... | 1 | 1 | 0 | Dr. Dundas Grant ... ... | 1 | 1 | 0 |

## THE MAY-OATWAY AUTOMATIC FIRE DETECTOR AND POSITION INDICATOR.

ON Thursday, May 9th, at 23, Old Broad-street, London, E.C., there was a press view of a heat and cold detector which should prove valuable for both private and public use, if in actual practice it answers to the delicate tests which it responded to when shown to us. The principle on which the invention is constructed is that of the expansion or contraction of metals by change of temperature. A protected wire is suspended along one side of a room and from the wire falls a small plug which drops between two terminals and closes a circuit with an electric bell when the wire expands. By various simple mechanical and electrical appliances the information gained by the automatic detectors is systematically codified and announced either to the householder or the fire-station, or to both. As the course taken by the fire is indicated useless deluging of rooms from which only smoke is issuing is prevented. The apparatus can be adapted equally well to the recording of low temperatures and its use in cold stores and freezing chambers is thus indicated. Where it is possible to summon trained aid this instrument is connected with the ordinary street alarm wires, in which case the signal reaches the brigade over its own wires by automatic telegraphy at the same time that the alarm is given at the seat of the fire. No human initiative is required, the premises may be quite unoccupied at the time, but within a few seconds the firemen will be apprised of the outbreak, and on their arrival will be shown its position and extent. According to a printed statement which we have received, "the May-Oatway system originated in New Zealand and is the joint invention of Mr. Chas. B. May, senior mechanical electrician to the Government of that colony, and Mr. G. H. Oatway. There the system is in general use, delivering its signals over the ordinary municipal streets alarm wires direct to the offices of the different brigades. Every fire insurance office (English, foreign, and Australasian) and every fire brigade testified in writing to its value; the Government of the colony have ordered its installation for the protection of the hundreds of inmates of the Industrial School; and the State Railways Department have opened negotiations for the right to manufacture and to use the invention under royalty to the Inventors' Syndicate. In England the system has secured the coöperation of Sir Eyre M. Shaw and Sir W. H. Preece, the two representatives of Great Britain at the International Fire Brigades Congress held in connexion with the Paris Exhibition last year."

## BENZ MOTOR-CARS.

*To the Editors of* THE LANCET.

SIRS,—Can any of your readers who have used the above cars in their practices say if they are to be relied on for a practice in a hilly country where gradients are steep, surface of main roads good, but of by-roads bad? Also cost of working and if, with ordinary care, they require frequent repairs.

I am, Sirs, yours faithfully,

May 14th, 1901. CORNWALL.

## "SEBORRHŒA."

*To the Editors of* THE LANCET.

SIRS,—Will "S.," whose communication appeared in THE LANCET of May 11th, p. 1378, try "Fowler's solution" internally? I have known scurf vanish like mist before a hot sun through it. Should he be inclined to try it, may I ask from him through your columns a note on the result? I was myself a martyr to the condition and Fowler's solution had good effect.

I am, Sirs, yours faithfully,

May 13th, 1901. H.

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*Miles Medicus.*—The communication is too long for our columns. The story is told with obvious animus against the employer and would not if it were published create any prejudice in favour of the writer. At the same time the employer is acting unfairly in not replying to questions asked by other practitioners concerning his late assistant.

*An Author who has been a Reviewer once, J. W.*, and *A. E.* are thanked for their communications, but if we opened our columns to lists of recommended fiction we should have difficulty in stemming the tide of suggestions which would reach us.

*An Actor* details a story which we can hardly credit. If he will send us copies of his letters to medical men and of their replies refusing to attend him we will do our best to assist him. He has not told us enough to make it safe to advise him.

*Mr. F. Hallas.*—A bottle containing a few drops of fluid—quite an insufficient quantity for analytical purposes—has been received.

*P. J. T.*—We do not give medical advice.

*Jelloid.*—Yes.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

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**During the week marked copies of the following newspapers have been received:**—*Blairgowrie Advertiser, Stratford Express, Carlisle Journal, Birmingham Post, Newcastle Journal, Southport Visitor, Bolton Chronicle, Shields Gazette, Surrey Times, Cheshire County News, Sheffield Daily Telegraph, Glasgow Herald, Chesterfield Times, Dundee Advertiser, Liverpool Daily Post, Halifax Courier, Crewe Chronicle, Bradford Observer, East Anglian Times, Hexham Herald, Manchester Guardian, Darlington Star, Scotsman, Citizen, Architect, Times of India, Pioneer Mail, Builder, St. Austell Star, Leeds Mercury, Edinburgh Evening News, Yorkshire Post, Reading Mercury, Bristol Mercury, Town and Country Journal (Sydney), Sydney Daily Telegraph, Middlesborough Morning Mail, Optician, City Press, Daily Colonist, Mining Journal, Surrey Advertiser, Lancashire Daily Post, Hertfordshire Mercury, Lancaster Observer, Le Courrier de la Presse (Paris), Blackpool Herald, Local Government Journal, Selkirk Reporter, The Age (Melbourne), St. Mary Cray Times, North Herts Journal, Kettering Guardian, Nuneaton Observer, Hunts County News, &c., &c.*

## METEOROLOGICAL READINGS.

*(Taken daily at 8.30 a.m. by Stewart's Instruments.)*

THE LANCET Office, May 16th, 1901.

| Date. | Barometer reduced to Sea Level and 32° F. | Direction of Wind. | Rainfall. | Solar Radia in Vacuo. | Maximum Temp. Shade. | Min. Temp. | Wet Bulb. | Dry Bulb. | Remarks at 8.30 A.M. |
|---|---|---|---|---|---|---|---|---|---|
| May 10 | 29·99 | N.E. | 0·32 | 96 | 56 | 46 | 47 | 49 | Overcast. |
| ,, 11 | 30·15 | S. | ... | 88 | 59 | 46 | 49 | 55 | Cloudy |
| ,, 12 | 30·34 | S.E. | ... | 100 | 66 | 46 | 50 | 57 | Cloudy |
| ,, 13 | 30·36 | N.E. | ... | 107 | 67 | 47 | 48 | 51 | Cloudy |
| ,, 14 | 30·36 | N.E. | ... | 113 | 73 | 44 | 49 | 53 | Fine |
| ,, 15 | 30·35 | N.E. | ... | 113 | 72 | 45 | 50 | 56 | Fine |
| ,, 16 | 30·18 | N.E. | ... | 109 | 67 | 47 | 46 | 50 | Cloudy |

# Medical Diary for the ensuing Week.

## OPERATIONS.

### METROPOLITAN HOSPITALS.

**MONDAY (20th).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

**TUESDAY (21st).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

**WEDNESDAY (22nd).**—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic, 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.).

**THURSDAY (23rd).**—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

**FRIDAY (24th).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic (10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

**SATURDAY (25th).**—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

## SOCIETIES.

**MONDAY (20th).**—ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (20, Hanover-square, W.).—7 P.M. Council. 8 P.M. Papers:—Mr. D. Cash: The Development of Pulp Nodules (with lantern illustrations).—Mr G. Brunton: A Method of Avoiding Pain in Dental Operations (incorporating an article by Mr. W. St. George Elliott). Casual Communication:—Mr. W. R. Barrett: A Case of Underhung Bite.

MEDICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.):—8.30 P.M. Annual Conversazione. Reception by the President. 8.45 P.M. Oration:—Mr. F. R. Cross: Some Landmarks in the Progress of Medical Science.

**TUESDAY (21st).**—PATHOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8.30 P.M. Annual General Meeting. Election of Officers and Council. Communications:—Mr. A. G. R. Foulerton and Mr. C. P. Jones: On the Morphology and General Characteristics of the Genus Streptothrix.—Dr. Thursfield: An Unusual Case of Intestinal Obstruction.—Mr. A. H. Jones: A Case of Calcification of the Pericardium. Card Specimens will be shown by Mr. T. Bryant, Dr. Fawcett, and Dr. Thursfield.

**WEDNESDAY (22nd).**—SOCIETY OF ARTS.—8 P.M. Mr. R. Brudenell Carter: Testing and Training Distant Vision, with special reference to Military Requirements.

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND (20, Hanover-square, W.).—4.30 P.M. Informal Exhibition of Cases. 5 P.M. Annual General Meeting.

**THURSDAY (23rd).**—MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND (11, Chandos-street, Cavendish-square, W.).—11 A.M. Educational Committee. 12 noon. Parliamentary Committee. 1.15 P.M. Council Meeting. 2 P.M. Dr. Treadgold and Dr. Watson: Exhibition of Microscopic Slides. 3 P.M. General Meeting. Papers:—Dr. C. Mercier: Punishment.—Dr. R. P. Smith: A Case of Epileptic Homicide.—Dr. D. G. Thomson: Senile Insanity, in what Institutions should it be treated? 6.30 P.M. Dinner at the Café Royale, Regent-street.

**FRIDAY (24th).**—CLINICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8.30 P.M. Annual General Meeting: Election of officers for the session 1901-1902. Papers:—Dr. Risien Russell and Mr. Raymond Johnson: Traumatic Subdural Hæmorrhage on the Sixth Day after the Injury and Successfully Treated by Operation.—Dr. Isambard Owen and Dr. W. J. Fenton: Extreme Dilatation of the Left Auricle, the Auricle Presenting in the Right Axilla.—Mr. Rickman Godlee: Acute Suppuration of the Thyroid Gland complicating Typhoid Fever.

## LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

**MONDAY (20th).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. M. Morris: Consultation. (Skin.)

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. Bidwell: The Application of Plaster-of-Paris Splints.

**TUESDAY (21st).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. R. L. Bowles: Consultation. (Medical.)

**WEDNESDAY (22nd).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. R. Harrison: Consultation. (Surgical.)

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. J. Mitchell Bruce: On the Diagnosis, Prognosis, and Treatment of Quiescent Tuberculosis (opening lecture of the Summer Session).

**THURSDAY (23rd).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Hutchinson: Consultation. (Surgical.)

CHARING-CROSS HOSPITAL.—4 P.M. Dr. Abercrombie: Medical Cases. (Post-Graduate Course.)

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr. Ball: Methods of Examination of the Throat, Nose, and Ear.

**FRIDAY (24th).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. D. Grant: Consultation. (Ear.)

ASSOCIATION OF ASYLUM WORKERS (Medical Society's House, 11, Chandos-street, Cavendish-square, W.).—4 P.M. Annual Meeting.

## EDITORIAL NOTICES.

It is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

*It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.*

*Lectures, original articles, and reports should be written on one side of the paper only,* AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

*Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.*

*We cannot prescribe or recommend practitioners.*

*Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."*

*Letters relating to the publication, sale and advertising departments of* THE LANCET *should be addressed "To the Manager."*

*We cannot undertake to return MSS. not used*

## MANAGER'S NOTICES.

### TO SUBSCRIBERS.

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

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## Communications, Letters, &c., have been received from—

A.—Association for Pure Vaccine Lymph, Lond.; A. Tilehill; Mons. J. Astier, Asnières; Messrs. Allen and Hanburys, Lond.; A. A. F. P., Zurich; Dr. W. A. Aikin, Lond.; An Actor, Ashford.

B.—Dr. H. A. Benham, Fishponds; Mr. T. Bryant, Lond; Messrs. Bates, Hendy, and Co., Reading; Dr. J. M. Barbour, Swanage; Dr. J. Rose Bradford, Lond.; Mr. R. Buchanan, Lond.; Messrs. R. Baines and Sons, Leeds; Birmingham, &c., Hospital for Skin Diseases, Hon. Secretary of; Messrs. J. and H. Bell, Nottingham; Mr. J. Pullen, Lond.; Messrs. H. C. Braun and Co., Lond.; Mr. J. J. Baxter, Lond.; Mr. J. Paul Bush, Bristol; Dr. J. R. Bowser, Penrith; Dr. J. Brownlee, Glasgow; Dr. J. B. Ball, Lond.; Dr. A. G. Bateman, Lond.; Dr. A. B. Blacker, Lond; Messrs. Boulton and Paul, Norwich.

C.—Mr. F. A. Cumming, Lond.; Messrs. Cassell and Co., Lond.; Messrs. T. Christy and Co., Lond.; Messrs. J. and A. Churchill, Lond.; Messrs. S. Chivers and Sons, Histon; Crookabury Sanatorium, Farnham, Medical Superintendent of; Central News, Lond, Manager of.

D.—Mr. A. Duke, Cheltenham; Mr. T. T. Dixon, Lond. Dundee Royal Infirmary, Secretary of; Mr. C. F. Dowsett, Winklebury; Dr. L. Dobson, Lond. Dorset County Hospital, Dorchester, Clerk of.

E.—Earl of Eldon, Lond.; Mr. S. J. D. Esser, Lond.; Eye and Ear Hospital, Tunbridge Wells, Secretary of; Dr. A. A. Rehner, Philadelphia.

F.—Messrs. J. Feency and Co., Birmingham; Messrs. Fairchild, Bros., and Foster, Lond.; Dr. H. Forestier, Aix-les-Bains; Mr. A. Fryers, Lond.

G.—Sir W. Gowers, Lond.; Messrs. Grandinet and Genlis, Lond.; Mr. J. Good, Stockport; Messrs. H. Garland and Co., West Kirby; Mr. R. Goodh, Lond., Messrs. Gordon and Gotch, Lond.; Messrs. Grindlay and Co., Lond.; Glamorgan County Asylum, Clerk of.

H.—Mr. H. B. Haynes, Bedford; Dr. A. K. Holt, Stoke-on-Trent; Mr. F. Hallas, Sheffield; Mr. G. Hermanni, Lond. Hospital for Sick Children, Newcastle-on-Tyne; Heigham Hall, Norwich, Licensee of Messrs. R. Heaton and Son, Bursiem; Mr. J. J. Harding Ballincollig; Mr. W. Harrison-Martindale, Lond.; Dr. Horne-Hay, Ailsa; Dr. G. E. Herman, Lond.; Hoine Chase, Boxhill-on-Sea, Lady Superintendent of.

I.—Mr. R. Insurance, Pontymister; Imperial Accident, &c., Insurance Co., Lond.; Institute of Chemistry of Great Britain and Ireland, Lond., Secretary of.

J.—Mr. W. H. Jessop, Lond.; Dr. H. W. Jacob Great Malvern; Jeyes' Sanitary Compounds Co., Lond.; J. A. C., Birmingham.

K.—Dr. H. R. Kenwood, Lond.; Mr. E. M. M. Knapp, Ross-on-Wye; Messrs. Knapp, Drewitt, and Sons, Kingston-on-Thames; Messrs. R. A. Knight and Co., Lond.

L.—Dr. S. H. Long, Norwich; London Guild of Hope, Secretary of, London; Mr. H. K. Lewis, Lond.; L. K. M.

M.—Mr. S. B. Mason, Pontypool; Dr. D. M. MacLeod, Edinburgh; Male and Female Nurses' Association, Lond.; Dr. Martin, Bristol; Manston Hospital, Seacroft, Medical Superintendent of; Maltine Manufacturing Co., Lond.; Mrs. A. G. Muir, Partick; Medical Society of Victoria, Melbourne, Secretary of; Mr. T. H. Middlebro', Owen Sound, Canada; Dr. G. Balfour Marshall, Glasgow; Sir John Monckton, Lond.; Surgeon-Major Matthews, V.M.S.C., Lond.; Manchester Royal Infirmary, Secretary of; Messrs. McKesson and Robbins, New York; Manchester Hospital for Consumption, Secretary of; Messrs. Mather and Crowther, Lond.; Mr. Malcolm-Smith, Lond.; Mr. W. Marriott, Lond.

N.—Rev. J. B. Nicholson, Powick; Mr. J. C. Needes, Lond.

O.—Dr. Thomas Oliver, Newcastle-on-Tyne; Mr. R. Owen, Lond.; Messrs. Oppenheimer and Son, Lond.

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